SCREENING SITE INSPECTION REPORT
FOR
METRO DSPL SYST INC
FAIRMONT CITY, ILLINOIS
U.S. EPA ID: ILD980607204
SS ID: NONE
TDD: F05-8912-090
PAN: FIL0417SB

OCTOBER 30, 1991

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

SIGNATURE PAGE
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Prepared by: Kerry Reyes Date: Oct 30, 1991
Kerry Reyes
FIT Report Preparer
Ecology and Environment, Inc.

Reviewed by: Cindy Edwards FOR CF Date: 10/30/91
Cliff Florczak
FIT Unit Manager
Ecology and Environment, Inc.

Approved by: Jerome D. Oskvarek Date: 10/30/91
Jerome D. Oskvarek
FIT Office Manager
Ecology and Environment, Inc.

TABLE OF CONTENTS

Table of Contents (Cont.)

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the Metro Dspl Syst Inc (Metro) site under contract number 68-01-7347.

The site was discovered in 1970, when Metro Disposal Systems, Inc. (MDSI), submitted an application to the Illinois Environmental Protection Agency (IEPA) for a permit to use the site as a landfill (Ballard 1970).

The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by Mary E. Dinkel, IEPA, and is dated April 2, 1985 (U.S. EPA 1985).

FIT prepared an SSI work plan for the Metro site under technical directive document (TDD) F05-8912-090, issued on December 13, 1989. The SSI work plan was approved by U.S. EPA on February 21, 1991. The SSI of the Metro site was conducted on May 8 and 9, 1991, under amended TDD F05-8912-090, issued on March 19, 1991.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of eight soil/sediment samples, four monitoring well samples, and two leachate well samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined

> preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI (U.S. EPA 1988).

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section presents information obtained from SSI work plan preparation, the site representative interview, and the reconnaissance inspection of the site.

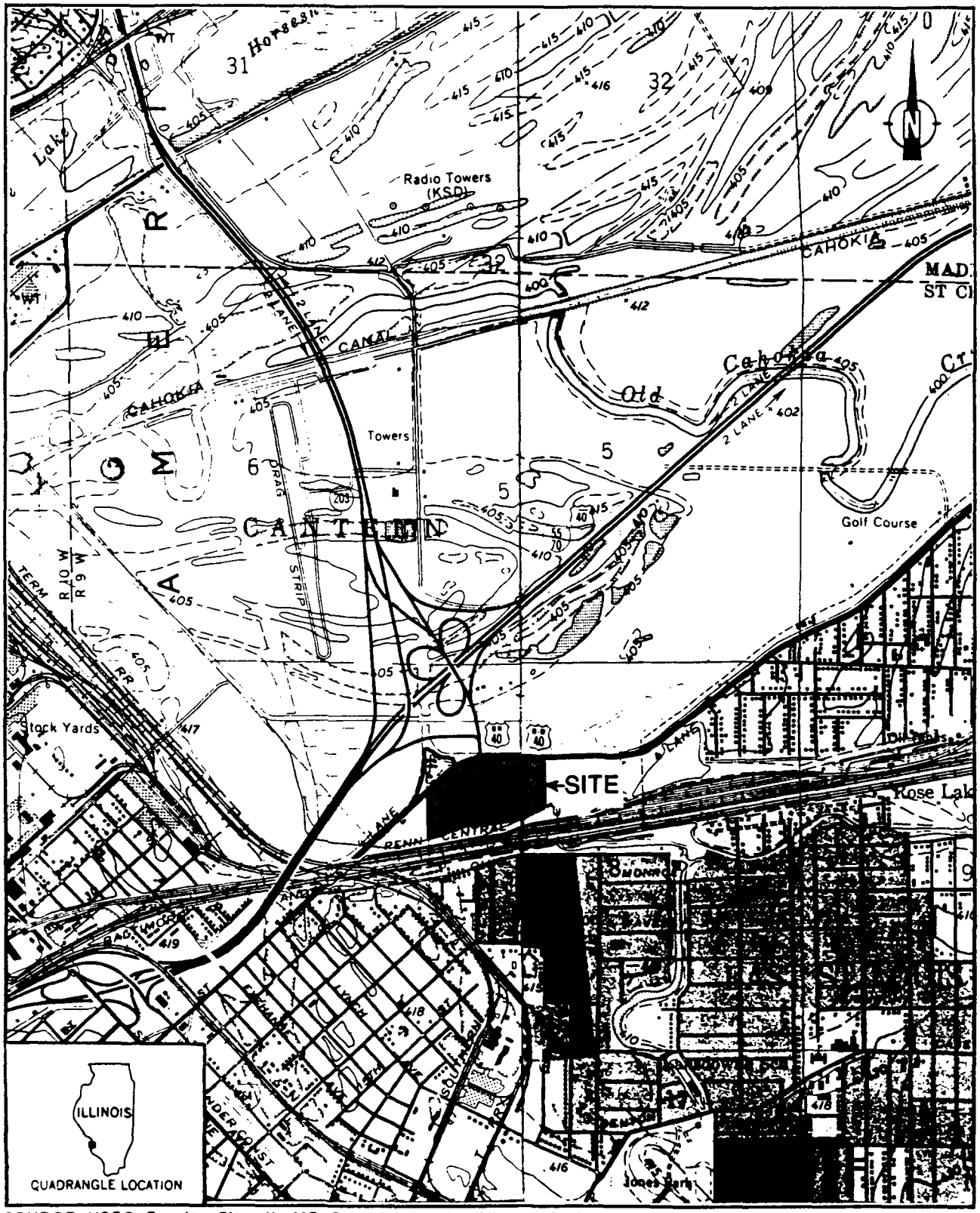
2.2 SITE DESCRIPTION

The Metro site is a currently inactive landfill that operated from 1970 to 1974 (Mensing 1991). The site is approximately 18 acres in size and contains an 8 1/2-acre fill area. The Metro site is located on the south side of Collinsville Road (also known as Route 40), near the intersection of Collinsville Road and Route 203 in Fairmont City, St. Clair County, Illinois (SW1/4NW1/4 sec. 8, T.2N., R.9W.)(see Figure 2-1 for site location). The site is adjacent to wetlands on the west and is bordered by an earthen berm on the east. On the south, an unpaved acces road and railroad tracks separate the site from more populated areas.

A 4-mile radius map of the Metro site is provided in Appendix A.

2.3 SITE HISTORY

The Metro site is currently owned by Consolidated Rail Corporation (Conrail). Conrail has owned the site since approximately 1978 (Pendergast and Warwick 1991). According to the St. Clair County Tax Assessor's Office, Conrail leased the site to MDSI for use as a sanitary landfill (Smith 1991). However, FIT file information indicates that the landfill closed in 1974. Prior to 1978 the site was owned by Penn Central Railroad Company (Penn Central) and operated by MDSI. Owners and



SOURCE: USGS, Granite City, IL-MO Quadrangle, 7.5 Minute Series, 1954, Photorevised 1968 & 1974; Monks Mound, IL Quadrangle, 7.5 Minute Series, 1954, Photorevised 1968 & 1974.

SCALE

0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION

operations at the site prior to its use as a landfill in 1970 are not known.

Disposal of wastes at the site began on August 24, 1970, under a permit issued by the Illinois Department of Public Health (IDPH) to MDSI to operate the site (Mensing 1991). MDSI was issued a permit by IDPH to landfill only Phase B of its operation, which consisted of approximately 8 acres. Phase A of the operation never existed (Mensing 1991).

During its operation as a landfill, the site received 20 compactor loads containing 40 cubic yards each of solid wastes and refuse from East St. Louis six days a week (Ballard 1970). The number of transporters of wastes to the landfill, the depth of the trenching operation, and the existence of a liner beneath the fill area are not known. However, a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 103(c) Notification of Hazardous Waste Site form, submitted by Anheuser-Busch, Inc., to U.S. EPA on June 9, 1981, indicates that Anheuser-Busch had generated and transported caustic label pulp, a corrosive, to MDSI landfills located in Jefferson Barracks, Missouri, and Fairmont City, Illinois (the Metro site). Approximately 467,000 cubic feet of caustic label pulp was shipped to both locations between August 1968 and February 1973. The exact dates and amounts of wastes that Anheuser-Busch shipped to each landfill are not known (U.S. EPA 1981).

During a routine inspection of the Metro site conducted by IEPA on July 21 and 22, 1971, yellow paint-like liquid, paper pulp, scum, and brown bottle washing liquid were observed in standing water at the site. Investigators documented that leachate was flowing into an on-site drainage ditch that eventually flowed into the Mississippi River (Illinois Pollution Control Board [IPCB] 1973). Similar observations were made by IEPA during routine inspections of the site in December 1971 and in May, July, and December 1972.

In January 1972, MDSI was denied a permit by the IEPA Department of Land Pollution Control (IEPA-DLPC). IEPA-DLPC inspected the Metro site on February 1, 1972, and observed a large hole in the landfill. A large drainage tile was located at the bottom of this hole. MDSI intended to fill this hole and close the Metro site (Child 1972).

IEPA issued an enforcement case with IPCB against MDSI on February 9, 1973, for violations of the Illinois Environmental Protection Act including: failure to provide daily cover of refuse, failure to provide final cover of filled areas, disposal of liquids or hazardous substances at the site, exceeding height limits for a landfill, allowing leachate to flow off-site into public waterways, and operating portions of the landfill without a permit (IPCB 1973). IPCB certified an opinion and order on June 7, 1973, to revoke the permit held by MDSI to operate a landfill at the site. The order stipulated that MDSI would close the site and apply final cover within 90 days from the date of the order and pay a $2,500 penalty to the state of Illinois for violations of the Illinois Environmental Protection Act. MDSI ceased to accept wastes at the site in approximately summer 1973 and completed closure operations of the site in approximately mid 1974 (Mensing 1991).

Although the Metro site was closed in 1974, Anheuser-Busch's 103(c) notification indicates that an additional 487,000 cubic feet of caustic label pulp wastes was shipped directly to the Metro site by Anheuser-Busch between March 1973 and June 1980 (U.S. EPA 1981). Routine inspections performed by IEPA after 1974 do not indicate any evidence of illegal dumping (Mann and Mensing 1978; McCarthy 1977).

During a routine inspection of the inactive Metro site on February 8, 1977, IEPA observed that the western slope of the site was burning beneath the surface, affecting an area of approximately 375 square yards. The fire was extinguished on February 14, 1977, by the Conrail engineering department, from Indianapolis, Indiana, which used heavy equipment to extinguish the fire and recovered refuse that had been exposed by the operation (McCarthy 1977). The cause of the fire is not known (Mensing 1991).

MDSI installed eight groundwater monitoring wells at the site after closure was completed. The date that these wells were installed is not known. As part of post-closure landfill activities required under the Illinois Environmental Protection Act, MDSI was required to sample these monitoring wells. It is not known whether this sampling was conducted. On June 7, 1978, IEPA completed installation of three additional ground-

On June 7, 1978, IEPA completed installation of three additional groundwater monitoring wells and two leachate monitoring wells at the site and began a one-year sampling program (Nienkerk 1978).

A second incident of a fire burning beneath the site was discovered by IEPA personnel who were passing by the site on August 29, 1978. IEPA observed that the surface vegetation atop the fill area had been burned and that a fire was then burning beneath ground surface. IEPA could not determine the origin of the fire. Conrail was notified of the fire on August 29, 1978, and used a private contractor to excavate, extinguish the fire, and recover the site by November 17, 1978 (Mann and Mensing 1978).

IEPA collected samples from groundwater monitoring wells and leachate monitoring wells in November 1979. Parameters that were tested for included heavy metals, phenols, polychlorinated biphenyls (PCBs), and chlorinated hydrocarbons. Analysis of groundwater monitoring well samples revealed heavy metals, including barium (0.5 ppm), arsenic (0.035 ppm), and manganese (5.5 ppm), as well as PCBs (0.6 µg/L) (IEPA-DLPC 1979). Results of leachate monitoring well samples for the same time period revealed organic compounds including Dieldrin (0.95 µg/L), Heptachlor epoxide (0.02 µg/L), Chlordane (0.96 µg/L), and PCBs (19.0 µg/L) (IEPA-DLPC 1979). Analysis forms for leachate monitoring wells do not contain information concerning detection of heavy metals in the leachate samples. It is not known whether other samples, such as upgradient groundwater and surface water samples, were collected during this time period.

Further sampling of on-site leachate monitoring wells for PCBs was conducted by IEPA on April 29, 1982. Analysis of these samples revealed PCBs (1.2 mg/L) (IEPA-DLPC 1982). Analysis of samples collected from groundwater monitoring wells of the same time period revealed PCBs at levels below (0.1 µg/L) (IEPA-DLPC 1982). An upgradient groundwater monitoring well sample was collected at this time and the levels of PCBs detected were similar to those detected in downgradient and sidegradient samples (IEPA-DLPC 1982).

No other remedial activity concerning the site has been documented.

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI of the Metro site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan with the following exceptions. The original work plan called for the collection of eight soil samples and six monitoring well samples. The work plan called for some of these soil samples to be collected at depths between 2 and 4 feet. All soil samples collected were surface samples. FIT did not collect deep soil samples because FIT believed that surface samples would adequately characterize the site. Four groundwater samples were collected at the Metro site. FIT located only four monitoring wells that could be sampled. FIT found one monitoring well that was bent at its base and therefore could not be sampled. No other monitoring wells could be located. FIT sampled the two on-site leachate wells at the recommendation of IEPA after its review of the work plan.

The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the Metro site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Ed Belmonte, FIT team leader, conducted an interview with Tom Pendergast, Director of Environmental Affairs for Conrail, and Mark Warwick, Real Estate Manager for Conrail, on May 8, 1991, at 8:20 a.m.

at the Metro site, Fairmont City, Illinois. Also present at the interview was Cliff Florczak of FIT. The interview was conducted to gather information that would aid FIT in conducting SSI activities.

3.3 RECONNAISSANCE INSPECTION

Following the site representative interview, FIT conducted a reconnaissance inspection of the Metro site and surrounding area in accordance with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection began at 10:35 a.m. and included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site activities and to make observations to aid in characterizing the site. FIT also determined sampling locations during the reconnaissance inspection. FIT was accompanied by the site representatives during the reconnaissance inspection.

Reconnaissance Inspection Observations. The Metro site is located in a sparsely populated area of Fairmont City, Illinois, south of the intersection of Route 203 and Collinsville Road (Route 40) in Fairmont City, Illinois. The general topography in the area of the site is relatively flat.

The Metro site is an approximately 18-acre parcel of land which is covered with thick vegetation. The site is bordered on the north by Collinsville Road, on the east by an earthen berm, on the south by Conrail Railroad tracks and on the west by low-lying wetlands. An abandoned gas station and an abandoned motel are located directly across from the site on the north side of Collinsville Road.

The low-lying wetlands that border the site on the west extend north from the Conrail Railroad tracks to the area of the abandoned gas station.

The western half of the site, approximately 8 1/2 acres, was used for the fill area. The fill area is characterized by its mounded appearance and uneven topography (see Figure 3-1 for site features). The fill area is generally well vegetated although a few areas of stressed vegetation and bare soil do exist. The eastern edge of this fill area slopes sharply toward low-lying wetlands that cover the eastern half of the site. This area is marked by standing water and thick vegetation.

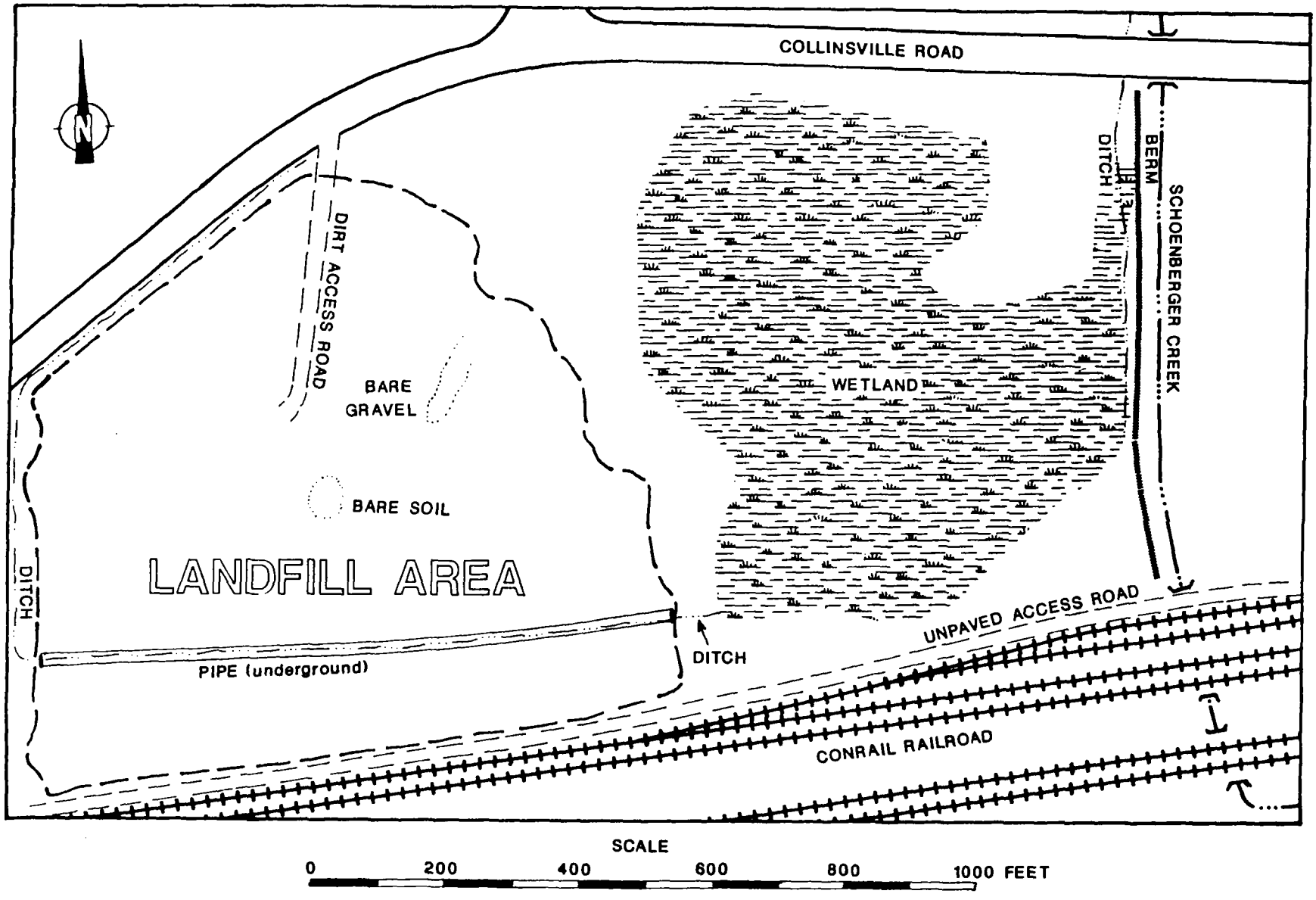


FIGURE 3-1 SITE FEATURES

The north border of the site is formed by Collinsville Road. A drainage ditch extends between Collinsville Road and the north side of the fill area. This ditch flows west, turns south at the northwest corner of the fill area, and extends along the western border of the site. The ditch appears to terminate near the southwest corner of the fill area. A pipe located underneath the landfill allows the water in the drainage ditch to flow underneath the landfill (Child 1972). The ditch reappears on the eastern side of the fill area and then empties into the on-site wetlands on the eastern portion of the site.

Another drainage ditch is located along the eastern edge of the site west of the earthen berm that forms the eastern boundary of the site. East of the berm is an intermittent stream called Schoenberger Creek that flows north underneath a bridge on Collinsville Road. The drainage ditch continues through a culvert beneath the bridge on Collinsville Road and empties into Schoenberger Creek approximately 500 feet northeast of the site.

An unpaved access road extends along the south side of the site, just north of the Conrail railroad tracks.

Access to the site from all boundaries is unrestricted. Primary access to the site is from Collinsville Road via a dirt access road that extends through the center of the fill area. At the time of the SSI, this access road was overgrown with thick vegetation.

FIT photographs from the SSI of the Metro site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine whether U.S. EPA Target Compound List (TCL) compounds or Target Analyte List (TAL) analytes were present at the site. The TCL and TAL are included with corresponding quantitation/detection limits in Appendix D.

On May 8, 1991, FIT collected two leachate well samples and one co-located leachate well sample, and eight soil/sediment samples. On May 9, 1991, FIT collected four monitoring well samples. FIT's offer to provide a portion of the on-site soil/sediment, monitoring well, and leachate samples to the site representative was declined.

Soil/Sediment Sampling Procedures. Seven soil/sediment samples were collected on-site, and one soil sample was collected off-site. Five of these samples were soil samples and three were sediment samples collected from the drainage ditches on-site.

Soil sample S3 was collected from an area of bare soil in the center of the fill area (see Figure 3-2 for on-site soil/sediment sampling locations). This location was selected because of its absence of vegetation. Soil sample S4 was collected from a location at the northeastern edge of the fill area, adjacent to the on-site low-lying wetlands. Sample S4 was collected from a location where discolored soils and stressed vegetation were observed. Soil sample S5 was collected from the eastern edge of the fill area, approximately 450 feet south of soil sample S4. Sample S5 was collected to determine whether TCL compounds and TAL analytes had migrated from the fill area to the wetlands on-site. Soil sample S6 was collected from a location at the northwest corner of the site alongside the drainage ditch. Sample S6 was collected to determine whether TCL compounds or TAL analytes are migrating from the fill area into the drainage ditch, which flows between the site and the adjacent property, which is occupied by wetlands. Soil sample S8 was collected as a potential background sample from a location approximately 700 feet east of the site (see Figure 3-3 for off-site soil sampling location). Sample S8 was collected from an area that appeared to be undisturbed to determine the representative chemical content of soils in the vicinity of the site.

Sediment samples S1 and S2 were both collected from the drainage ditch located along the west edge of the berm on the site's east side to determine whether TCL compounds or TAL analytes could potentially migrate via surface water from the fill area to the berm. Sediment sample S1 was collected in the drainage ditch from a location approximately 300 feet north of the railroad tracks. Sediment sample S2 was collected in the drainage ditch from a location approximately 200 feet south of Collinsville Road. Sediment sample S7 was collected from the northwestern corner of the site in the drainage ditch located along the northern edge of the fill area. Sample S7 was collected in order to determine whether TCL compounds or TAL analytes had migrated from the fill area to the drainage ditch.

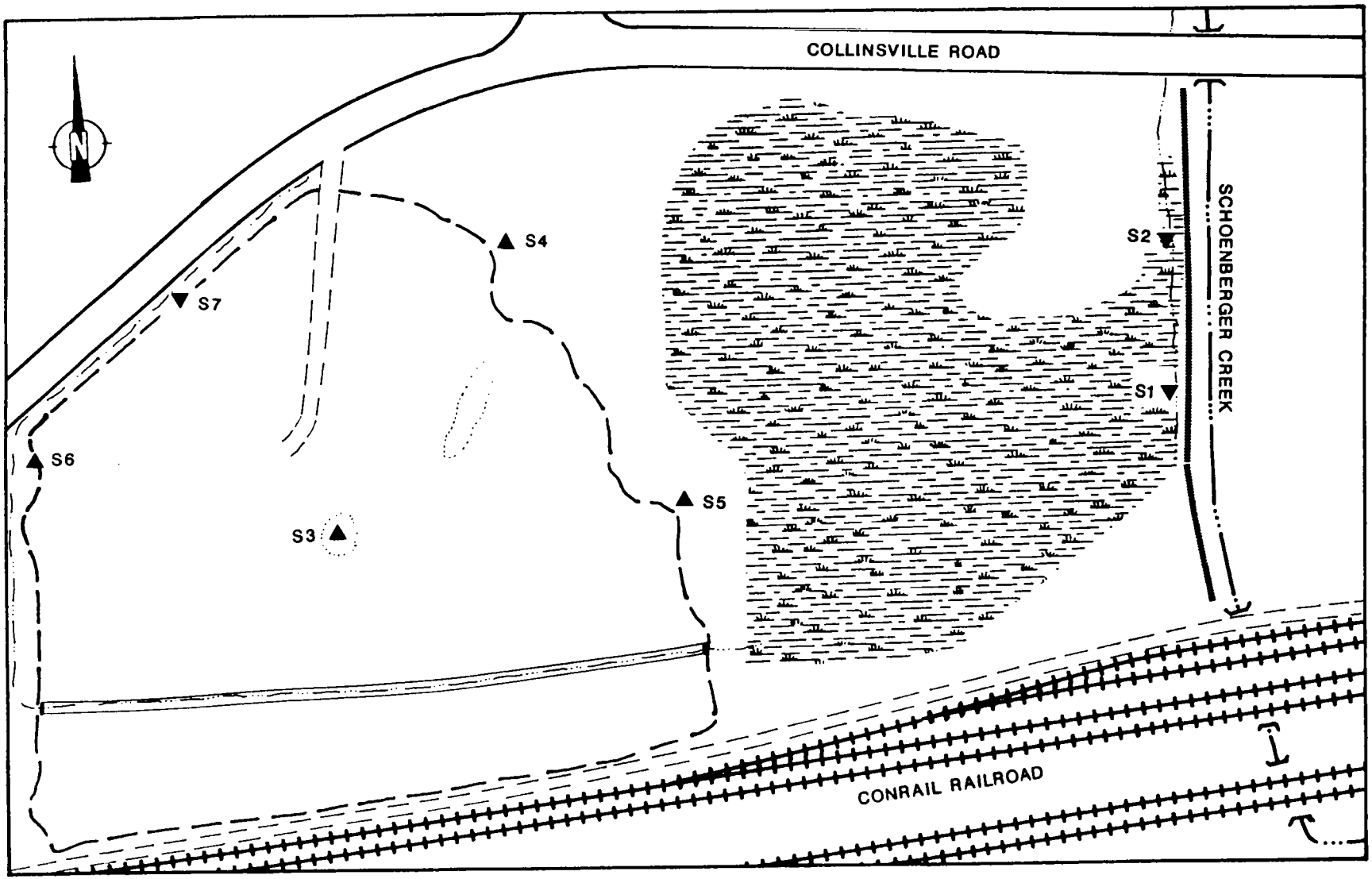


FIGURE 3-2 ON-SITE SOIL/SEDIMENT SAMPLING LOCATIONS

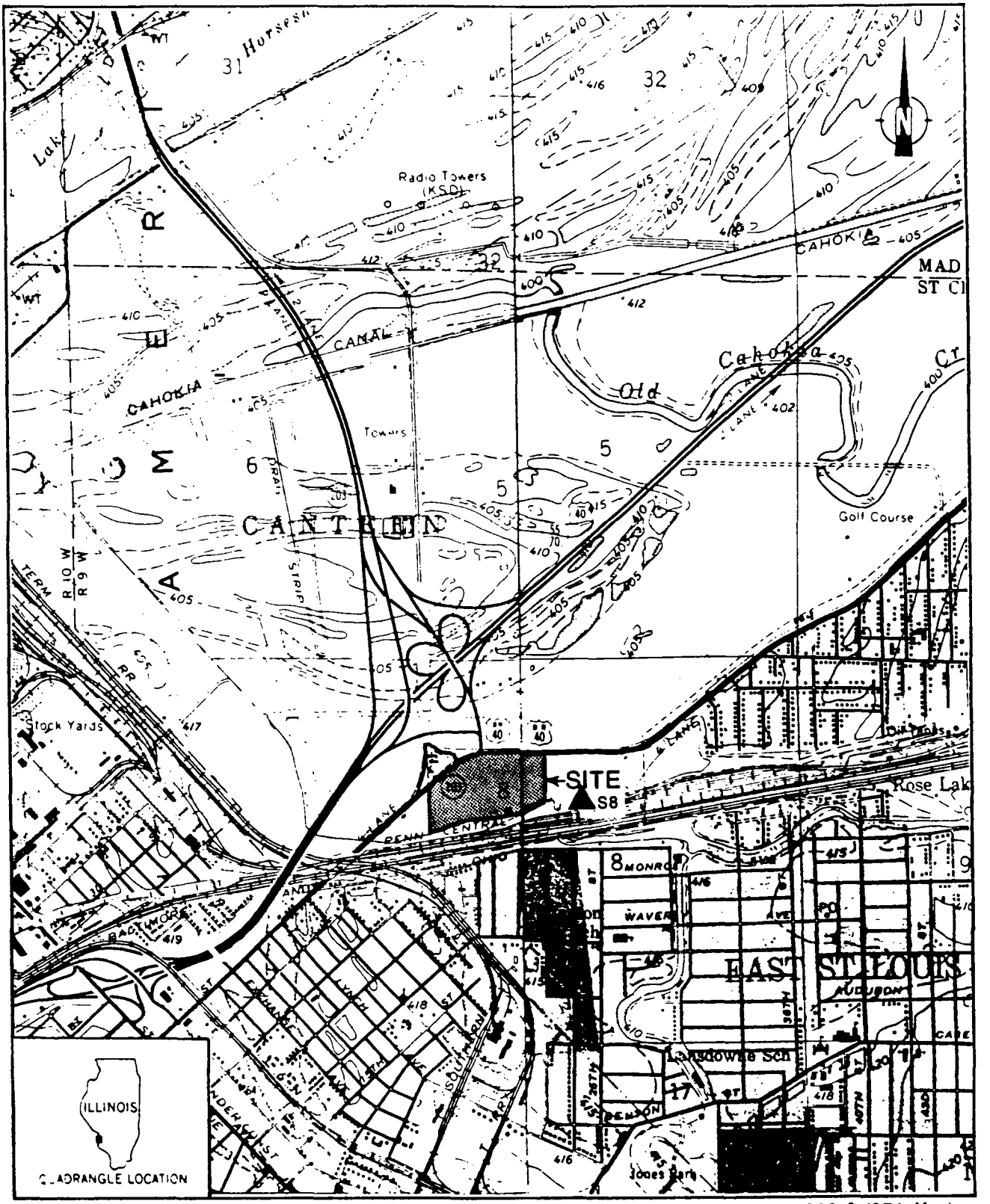
All soil/sediment samples were grab samples collected at depths no greater than 6 inches. Material for each surface sample was collected with a stainless steel spoon and a hand trowel. The sample portions collected for volatile organic analysis were transferred directly to sample bottles. The remaining sample portions were placed into a stainless steel bowl, mixed, and then transferred to the appropriate sample bottles, using a stainless steel spoon or a hand trowel (E & E 1987).

Standard E & E decontamination procedures were adhered to during the collection of all soil/sediment samples. The procedures included the scrubbing of all equipment (e.g., trowel, stainless steel spoons, and bowl) with a solution of detergent (Alconox) and distilled water, and triple-rinsing the equipment with distilled water before the collection of each sample (E & E 1987). All soil/sediment samples were packaged and shipped in accordance with U.S. EPA-required procedures.

As directed by U.S. EPA, all soil/sediment samples were analyzed using the U.S. EPA Contract Laboratory Program (CLP).

Monitoring Well Sampling Procedures. Five monitoring wells were observed on-site. A pair of nested monitoring wells (one shallow [MW3] and one deep [MW1]), is located in the southeast corner of the site. Another pair of nested wells is located at the northeast corner of the site. The deeper of this pair, monitoring well (MW4), was sampleable. However, FIT discovered that the casing of the shallow groundwater monitoring well (G14S) was bent at its base. The fifth monitoring well, MW2, is located approximately 100 feet from the edge of the fill area in the wetlands. FIT could not find the other six monitoring wells that IEPA indicated were present at the site.

Monitoring well samples MW1 and MW3 were collected from on-site monitoring wells located in the southeast portion of the site (see Figure 3-3 for monitoring well sampling locations). Monitoring well sample MW2 was collected from a monitoring well located in the south-central portion of the site Samples MW1, MW2, and MW3 were collected in order to determine whether TCL compounds and TAL analytes were migrating to groundwater. It is assumed that local groundwater flow is in the direction of wetlands located east and west of the fill area. Regional groundwater flow is assumed to flow westerly toward the Mississippi River, however, no groundwater samples were collected on the western



SOURCE: USGS, Granite City, IL-MO Quadrangle, 7.5 Minute Series, 1954, Photorevised 1968 & 1974; Monks Mound, IL Quadrangle, 7.5 Minute Series, 1954, Photorevised 1968 & 1974.

SCALE

0 ½ 1 MILE

FIGURE 3-3 OFF-SITE SOIL SAMPLING LOCATION

side of the landfill because no wells could be located in this area. Monitoring well MW2 was sampled because of its proximity to the fill area. A potential upgradient sample was collected from monitoring well MW4 because it is the deepest monitoring well and is located the farthest distance from the fill area. The monitoring wells were locked and capped and appeared to be in good condition at the time of the SSI. Well depth and depth to water measurements were collected by FIT during the SSI (see Table 3-1 for monitoring well data).

In accordance with U.S. EPA quality assurance/quality control (QA/QC) requirements, a duplicate monitoring well sample and a field blank sample were collected. The duplicate sample was collected at location MW1. The field blank sample was prepared from distilled water.

All groundwater monitoring wells were purged of three to five volumes of standing water prior to the collection of each sample. The samples for volatile organic analysis were collected first. All groundwater monitoring well samples were collected with stainless steel bailers that had been scrubbed with a solution of detergent (Alconox) and distilled water, and triple-rinsed with distilled water prior to the collection of each sample (E & E 1987).

As directed by U.S. EPA, all groundwater monitoring well samples were analyzed using the U.S. EPA CLP.

Leachate Well Sampling Procedures. Leachate well samples LW1 and LW2 were collected from on-site leachate monitoring wells to determine whether TCL compounds and TAL analytes were present in leachate beneath the landfill (see Figure 3-4 for leachate well sampling locations). Sample LW1 was collected from a leachate well located near the southwest corner of the fill area, approximately 100 feet north of the railroad tracks. Sample LW2 was collected from a well near the northeast corner of the fill area, approximately 400 feet south of Collinsville Road. Leachate well depths and depths to leachate measurements were not collected by FIT during the SSI. The leachate wells that were sampled were locked and capped and appeared to be in good condition at the time of the SSI.

In accordance with U.S. EPA quality assurance/quality control (QA/QC) requirements, a duplicate leachate well sample and a field blank sample were collected on each day of sampling. The duplicate sample was

Table 3-1

MONITORING WELL DATA*

FIT Well Designation	IEPA Well Designation	Well Depth (feet)	Depth to Water (feet)
MW1	G15D	43.7	11.2
MW2	G607	20.0	3.5
MW3	G15S	17.6	4.4
MW4	G14D	57.3	9.6

* Top of Casing could not be determined because no well logs are available for the monitoring wells.

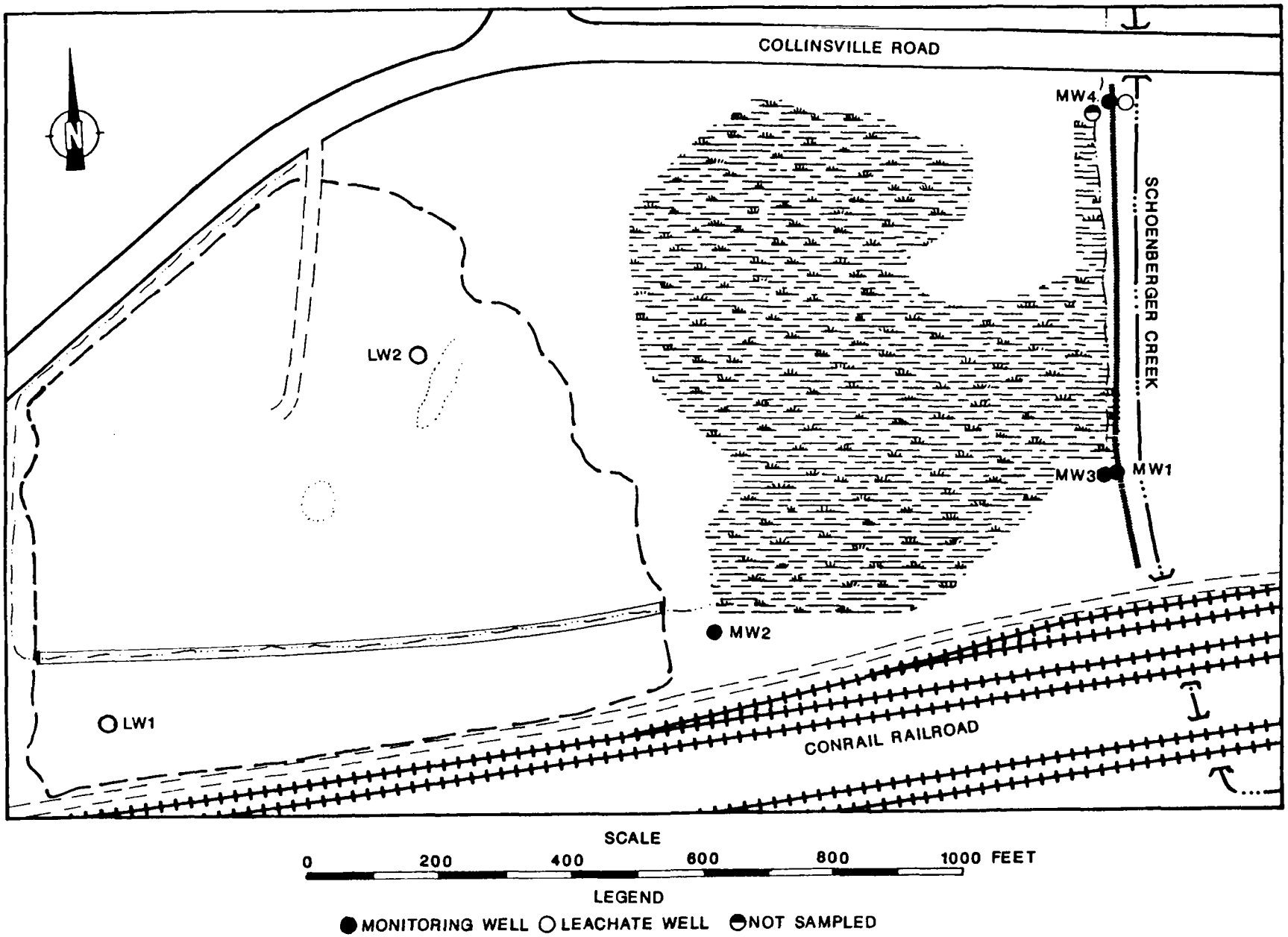


FIGURE 3-4 MONITORING AND LEACHATE WELL LOCATIONS

collected at location LW1. A co-located sample (designated LW2A) was collected and submitted for a partial analysis. Only analysis for TCL compounds was conducted on this additional sample. The field blank sample was prepared from distilled water.

Leachate monitoring wells were not purged of three to five volumes of standing leachate prior to the collection of each sample. All leachate monitoring well samples were collected with stainless steel bailers that had been scrubbed with a solution of detergent (Alconox) and distilled water, and triple-rinsed with distilled water prior to the collection of each sample (E & E 1987). Volatile organic samples were collected first.

As directed by U.S. EPA, all leachate monitoring well samples were analyzed using the U.S. EPA CLP.

4. ANALYTICAL RESULTS

This section presents results of the chemical analysis of soil/sediment, monitoring well, and leachate well samples collected by FIT during the SSI of the Metro site. All samples except leachate well samples LW1 and LW2A were analyzed for volatile organics, semivolatile organics, pesticides/polychlorinated biphenyls (PCBs), metals, and cyanide. Leachate well sample LW1 was not analyzed for volatile or semivolatile organics; leachate well sample LW2A was submitted only for organics and pesticides/PCBs analysis. Complete chemical analysis results of FIT-collected soil/sediment and leachate and monitoring well samples are provided in Tables 4-1 and 4-2.

Quantitation/detection limits used in the analysis of FIT-collected soil/sediment and leachate well and monitoring well samples are provided in Appendix D.

The analytical data from the chemical analysis of FIT-collected samples for this SSI have been reviewed under the direction of U.S. EPA for validity; the review has been approved by U.S. EPA. The analytical data have also been reviewed by FIT for usability. Any additions, deletions, or changes resulting from review of the data have been incorporated in the chemical analysis results tables presented in this section.

Table 4-1 (Cont.)

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8
sodium	271B	306B	75.0B	390B	990B	824B	479B	123B
thallium	--	0.47B	--	--	0.43B	--	--	0.30B
vanadium	35.4	39.1	23.7	22.3	42.7	31.7	24.7	30.4
zinc	190	622	333	120	686	288	526	134

-- Not detected.

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
S	Analysis by Method of Standard Additions.	Value is quantitative.
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semiquantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semiquantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.

Table 4-1
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED SOIL SAMPLES
FOR THE METRO SITE SSI

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8
Date	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91
Time	1230	1245	1250	1300	1320	1503	1500	1345
CLP Organic Traffic Report Number	ES387	ES388	ES389	ES390	ES391	EHW88	EHW89	EHW90
CLP Inorganic Traffic Report Number	MEHA93	MEHA94	MEHA95	MEHA96	MEHA97	MEHA98	MEHA99	MELP98
Compound Detected (values in ug/kg)								
Volatile Organics								
methylene chloride	--	150J	--	--	--	--	680D	--
acetone	120	52	30	--	230	350	1,100D	--
carbon disulfide	5J	--	3J	--	--	6J	--	4J
2-butanone (MEK)	--	--	--	--	--	--	430D	--
benzene	--	--	--	--	7J	--	--	--
toluene	2J	--	--	--	4J	4J	--	2J
chlorobenzene	--	--	--	--	2,500E	100	--	--
Semivolatile Organics								
fluoranthene	--	--	--	--	--	--	1,200J	--
pyrene	--	--	--	--	--	--	970J	--
Pesticides/PCBs								
Dieldrin	--	--	44	--	--	--	--	--
Analyte Detected (values in mg/kg)								
aluminum	14,000	18,600	10,100	11,500	22,300	15,600	7,650	13,100
arsenic	5.1NJ	8.3NJ	4.5NJ	11.9NsJ	7.1NJ	5.2NJ	5.8NJ	9.2NsJ
barium	159*	591*	193*	223*	403*	323*	333*	241*
beryllium	1.3BJ	1.6BJ	0.63BJ	0.75BJ	1.9BJ	1.1BJ	0.57BJ	1.1BJ
cadmium	2.9J	10.1	4.3	--	14.6	2.9J	6.9	3.3J
calcium	7,240	7,260	4,690	16,400	9,930	34,100	27,300	13,600
chromium	21.5	67.4	25.8	22.0	32.0	27.6	78.2	22.4
cobalt	10.9B	10.6B	6.7B	9.3B	11.4B	7.7B	6.3B	9.9B
copper	21.7	46.5	31.1	22.1	91.2	34.2	54.4	25.2
iron	22,800	36,100	17,900	35,900	31,900	41,000	16,700	21,500
lead	75.7*sJ	125*J	105*J	29.5*J	109*J	66.4*J	284*J	60.1*J
magnesium	5,360	4,670	3,060	4,910	6,000	5,490	4,490	6,500
manganese	214	381	125	411	479	435	255	605
mercury	--	0.46	0.20	--	--	--	--	--
nickel	26.1	27.4	21.0	28.8	47.7	32.1	21.1	28.8
potassium	2,780	3,470	1,910	2,710	4,210	3,660	1,500B	3,050
selenium	0.37BNWJ	0.74BNWJ	0.30BNWJ	--	0.82BNWJ	0.47BNWJ	0.37BNWJ	--

Table 4-2
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED MONITORING WELL SAMPLES
FOR THE METRO SITE SSI

Sample Collection Information and Parameters	Sample Number MW1	Duplicate	MW2	MW3	MW4	Blank
Date	5/9/91	5/9/91	5/9/91	5/9/91	5/9/91	5/9/91
Time	1130	1130	1020	1230	1200	1300
Organic Traffic Report Number	EKX66	EHW94	EMN98	EHW91	EHW92	EJW99
Inorganic Traffic Report Number	MELP99	MELT96	MELT91	MELT92	MELT93	MELT97
Temperature (°C)	13	13	14	15	15	18
Specific Conductivity (μmhos)	1,334	1,334	4,520	1,326	799	8.13
pH	6.08	6.08	6.27	6.6	7.09	6.71
Compound Detected (values in μg/L)						
Volatile Organics						
chloroform	--	--	--	--	--	4J
bromodichloromethane	--	--	--	--	--	3J
dibromochloromethane	--	--	--	--	--	2J
benzene	--	--	10	--	--	--
chlorobenzene	--	--	120	--	--	--
Semivolatile Organic†						
Analyte Detected (values in ug/L)						
antimony	45.2B	--	73.4	44.5B	--	--
arsenic	2.4BWJ	--	15.1J	2.2BJ	6.4BJ	--
barium	101B	98.0B	549	235	50.0B	--
beryllium	--	1.3BJ	--	--	--	--
calcium	162,000	157,000	368,000	152,000	80,400	13,400
cobalt	--	5.7B	6.7B	--	--	--
copper	--	6.1BJ	--	--	13.3BJ	7.1BJ
iron	20.8B	--	39,200	5,600	24.4B	--

Table 4-2 (Cont.)

Sample Collection Information and Parameters	Sample Number MW1	Duplicate	MW2	MW3	MW4	Blank
lead	--	--	1.4B	1.5BW	1.3B	--
magnesium	33,600	31,900	113,000	28,800	27,300	3,810B
manganese	335	323	2,320	1,080	4.8BJ	1.8BJ
nickel	27.7B	22.5B	50.0	--	--	--
potassium	4,920BJ	4,470BJ	30,100J	7,350J	5,250J	13,000
selenium	1.5BNWJ	--	--	--	--	--
sodium	38,000	37,100	199,000	29,800	14,900J	3,710B
vanadium	4.0BJ	--	--	--	--	--
zinc	18.4BJ	22.6J	12.3BJ	15.4BJ	142	6.7B

-- Not detected.

† The semivolatile analysis results for sample MW1 are deemed unusable (R).

Table 4-2 (Cont.)

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.

Table 4-3
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED LEACHATE WELL SAMPLES
FOR THE METRO SITE SSI

Sample Collection Information and Parameters	Sample Number LW1	Duplicate	LW2	LW2A†	Blank
Date	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91
Time	1645	1645	1600	1600	1630
CLP Organic Traffic Report Number	EKF57	EHM03	EHM02	EHM02	EHM04
CLP Inorganic Traffic Report Number	MELT98	MEKN02	MELT99	†	MEKN03
Compound Detected (values in µg/L)					
Volatile Organics					
methylene chloride	NR	12,000B	4,100B	1,300D	—
acetone	NR	—	6,400J	2,600BD	—
2-butanone (MEK)	NR	—	3,400	4,100JD	—
1,1,1-trichloroethane	NR	1,200J	—	—	—
benzene	NR	6,500	—	—	—
4-methyl-2-pentanone	NR	—	10,000J	6,600DJ	—
toluene	NR	—	1,800	1,200D	—
chlorobenzene	NR	140,000	—	—	—
Semivolatile Organics	NR	††	††	††	††
Pesticides/PCBs					
Aroclor 1242	130	36	—	—	—
Analyte Detected (values in µg/L)					
aluminum	—	—	14,600		—
antimony	30.2B	—	31.8B		—
arsenic	3.3BWJ	1.2BJ	16.5J		—
barium	469	464	1,220		—
beryllium	—	—	2.1B		—

Table 4-3 (Cont.)

Sample Collection Information and Parameters	Sample Number LW1	Duplicate	LW2	LW2A†	Blank
calcium	138,000	138,000	138,000		--
chromium	--	--	47.1		--
cobalt	6.3B	5.9B	13.2B		--
copper	--	--	119		23.5BJ
iron	4,230	3,650	67,500		--
lead	4.1	2.3B	108		--
magnesium	69,800	68,300	56,400		--
manganese	183	185	609		--
mercury	--	--	0.53		--
nickel	--	13.0B	74.2		--
potassium	79,100	78,000	65,100		--
silver	--	5.6B	--		--
sodium	253,000	249,000	120,000		102BJ
vandium	--	--	26.5B		--
zinc	7.1BJ	11.7BJ	406		--

† Sample LW2A was analyzed only for organics and pesticides/PCBs.

-- Not detected.

NR Analysis for volatile and semivolatile organics was not performed for samples LW1.

†† The semivolatile analysis results for the duplicate, samples LW2 and LW2A, and the blank are deemed unusable (R).

Table 4-3 (Cont.)

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section presents discussions of data and information pertaining to potential migration pathways and targets of TCL compounds and TAL analytes that are possibly attributable to the Metro site. The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

The analysis of FIT-collected leachate well samples indicated the presence of TCL compounds and TAL analytes including toluene in LW2 (1,800 µg/L); acetone in LW2 (6,400J µg/L); methylene chloride in LW2 (4,100B µg/L); 4-methyl-2-pentanone in LW2 (10,000J µg/L); Aroclor 1242 in LW1 (130 µg/L); antimony in LW2 (31.8B µg/L); and arsenic in LW2 (16.5J µg/L) (see Table 4-2 for definition and interpretation of qualifiers).

The analysis of FIT-collected downgradient monitoring well samples revealed TCL compounds and TAL analytes including chlorobenzene (120 µg/L), benzene (10 µg/L), manganese (2,320 µg/L), arsenic (15.1J µg/L), and antimony (73.4 µg/L), all in MW2.

These were all detected at levels above those of potential upgradient sample MW4. The chlorobenzene and antimony may be attributable to the site based on the following information.

- Chlorobenzene and antimony were not detected in the upgradient monitoring well sample.

- Chlorobenzene was detected in on-site leachate well LW1 at 140,000 µg/L.

- Antimony was detected in on-site leachate well LW2 at 31.8B µg/L).

However, attribution cannot be conclusively established at this time because no monitoring wells could be found on the northwest side of the site between the abandoned gas station and the landfill and because groundwater flow in the immediate area is suspected to be to the east and west toward the wetlands on either side of the site, therefore it is difficult to identify an upgradient well.

The analysis of FIT-collected soil samples revealed TCL compounds and TAL analytes including chlorobenzene in samples S5 (2,500E µg/kg) and S6 (100 µg/kg), Dieldrin (44 µg/kg) in S3, and mercury in S3 (0.20 mg/kg) (see Table 4-1 for definition and interpretation of qualifiers). These TCL compounds and TAL analytes appear to be attributable to the site based on the following information.

- Chlorobenzene and mercury were detected in leachate within the fill area.

- Past inspections performed by IEPA revealed many noncompliances and violations of the Rules and Regulations for Refuse Disposal Sites and Facilities, including disposal of liquids or hazardous substances (IPCB 1973).

- Past sampling of leachate wells by IEPA detected the presence of Dieldrin (IEPA-DCPC 1979).

A potential exists for TCL compounds and TAL analytes to migrate from the site to groundwater in the area of the site based on the following information.

- There is no indication that the site has an engineered liner.

- TCL compounds and TAL analytes were detected in samples collected from on-site leachate wells, monitoring wells, and soils.

- Arsenic was detected in leachate wells and monitoring wells on-site.

The potential for TCL compounds and TAL analytes to migrate from the site to groundwater is also based on the following geologic information. The Metro site lies near the base of an abandoned channel of the Mississippi River in the broad Mississippi River valley. The geology of the site area consists of recent valley-fill alluvium, glacial outwash alluvium, and bedrock. The recent valley-fill alluvium has been deposited by the meandering and periodic flooding of the Mississippi River (USGS 1954, 1954a). These unconsolidated deposits consist of interfingering bodies of gravel, sand, silt, and clay that were formed as channel lag, point bars, crevasse-splay, floodplain, and slough or oxbow lake deposits (Reineck and Singh 1980; see Appendix B for well logs of the area of the site).

Glacial outwash deposits of both Illinoian and Wisconsinan ages underlie the recent alluvium. These older deposits and the recent alluvium both constitute the total thickness of valley-fill material which was likely deposited as an uninterrupted sequence (Southwestern Illinois Metropolitan and Regional Planning Commission [SIMRPC] 1983). Well logs in the area of the site indicate that the thickness of the valley-fill material ranges from approximately 115 to 265 feet. These well logs also indicate that the deposits are generally very coarse, and as large as boulders near the base. Near the site, the valley-fill deposits overlie shale of Carboniferous age. More regionally, this shale is a minor part of massive limestone and dolomite units known as the Lower Chesterian Series (SIMRPC 1983; Appendix E). Because the bedrock is of low permeability and has poor water quality with depth, the bedrock does not constitute an important aquifer in the area (Schicht 1965).

The principle aquifer in the site area is the unconsolidated valley-fill material and this material is considered to be the aquifer

of concern (AOC). Well logs from the site area indicate that local wells are screened primarily in sand and gravel units in the unconsolidated deposits at relatively shallow depths and groundwater is drawn from sand and gravel deposits within the valley-fill. According to area well logs, the depth to groundwater in the area of the site is as shallow as 11 feet below the ground surface.

Regional groundwater flow in the area of the site is to the west-southwest toward the Mississippi River but may deviate from this locally because of the presence of wetlands to the east and west of the site.

Most of the population within a 3-mile radius of the site obtains its drinking water from Illinois-American Water Company, which draws its water from the Mississippi River more than 3 miles upstream from the site (Roe 1987).

Outside of the Illinois-American Water Company water supply area and the Mound Public Water Supply, which is located approximately 4 miles northeast of the site, approximately 375 persons obtain drinking water from private wells within the 3-mile radius of the site, and are therefore potential targets for groundwater contamination. This population was determined by counting houses on United States Geological Survey (USGS) topographic maps of the area (USGS 1954, 1954a, 1954b, 1954c), 105 and 30, for Madison County and St. Clair County, respectively, and multiplying by the 1980 Census averages of 2.75 persons per household for Madison County and 2.89 persons per household for St. Clair County (U.S. Bureau of the Census 1982). The nearest drinking water well is located approximately 1/4 mile north of the site.

According to the University of Illinois Cooperative Extension Service, there are also approximately 400 acres of farmland within a 3-mile radius of the site that are irrigated with groundwater (Hardiman 1985).

5.3 SURFACE WATER

The drainage ditch that extends along the berm on the east border of the site empties into Schoenberger Creek located 150 feet east of the berm. Schoenberger Creek empties into a nameless river located approximately 1/4 mile northwest of the site which drains into the Cahokia Canal located approximately 1 1/2 miles northwest of the site.

No surface water samples were collected during the SSI of the Metro site. However, on-site sediment samples (S1 and S2) were collected from the drainage ditch that extends along the eastern edge of the site. TCL compounds and TAL analytes were detected in sediment samples including acetone (1,100D), fluoranthene (1,200J), and chromium (78.2 mg/kg) in S7, and mercury (0.46 mg/kg) and cadmium (10.1 mg/kg) in S2. These are not attributable to the site because no background sediment sample was collected.

A potential exists for TCL compounds and TAL analytes to migrate from the site to surface water in the area of the site based on the following information.

- Mercury was detected in FIT-collected sediment samples from the drainage ditch on-site. Mercury was also detected in leachate well LW2 at 0.53 mg/L.

- TCL compounds and TAL analytes were detected in on-site sediment samples at concentrations above those of the background soil sample, including fluoranthene in S7 (1,200J µg/kg) and pyrene (970J µg/kg) in S7.

- Leachate seeps have been documented to have flowed off-site into surface waterways (IPCB 1973).

- Wetlands are located on-site and adjacent the west border of the site.

- The drainage ditch on-site empties into Schoenberger Creek approximately 500 feet northeast of the site.

- The site is located in a 100-year floodplain.

No surface water intakes are located within 3 miles downstream of the site. It is not known whether the unnamed river or Cahokia Canal is currently used. The Mississippi River is used for recreational and commercial purposes (Tri Cities Area Chamber of Commerce 1991).

5.4 AIR

A release of TCL compounds or TAL analytes to the air at the Metro site was not documented during the SSI of the Metro site. During the reconnaissance inspection, FIT site-entry instruments (OVA 128, combination oxygen meter and explosimeter, and hydrogen cyanide monitor) did not detect levels that deviated from background concentrations at the site, with the exception of methane. In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

A potential does not exist for TCL compounds and TAL analytes to migrate from the site via windblown particulates, based on the following information.

- The site is generally well vegetated.
- The site is located in a swampy area that would inhibit dusty conditions.

5.5 FIRE AND EXPLOSION

According to federal, state, and local file information reviewed by FIT, and an interview with Bob Belba, Fairmont City Fire Chief, no documentation exists of an incident of fire or explosion at the site since approximately 1982 (Belba 1991). According to state documentation, fires have occurred beneath the ground surface of the site in February 1977, and August 1978 (McCarthy 1977; Mann and Mensing 1978). The cause of these fires is not known (Mensing 1991). FIT site-entry equipment readings did not indicate a potential for fire or explosion at the site at the time of the SSI.

However, because no safety precautions have been taken to prevent further fires at the site, a potential for fire and/or explosion at the site does exist. This potential is based on the following information.

- Past fires have occurred beneath the ground on-site (McCarthy 1977; Mann and Mensing 1978).
- Flammable liquids, toluene and chlorobenzene, were detected in FIT-collected leachate samples.

- Fairmont City Fire Chief Bob Belba indicated that a fire could possibly occur on-site (Belba 1991).

The population within a 2-mile radius of the site potentially affected by a fire or explosion is 17,654 persons. This population was calculated by counting houses within a 2-mile radius of the site on USGS topographic maps (USGS 1954, 1954a, 1954b, 1954c) and multiplying this number by persons-per-household values of 2.89 for St. Clair County and 2.75 for Madison County, Illinois (U.S. Bureau of the Census 1982).

5.6 DIRECT CONTACT

According to federal, state, and local file information reviewed by FIT, observations made during the SSI, and the interview with the site representatives, no incidents of direct contact with TCL compounds or TAL analytes at the Metro site have been documented.

There is a potential for the public to come into contact with TCL compounds and TAL analytes at the site. This potential is based on the following information.

- Access to the site is unrestricted.

- Flow of leachate off-site was documented in 1971 and 1972 (IPCB 1973; Becker 1971).

- Surface soil samples indicate the presence of TCL compounds and TAL analytes.

The population within a 1-mile radius of the site potentially affected through direct contact with TCL compounds and TAL analytes at the Metro site is 6,505 persons. The nearest resident is approximately 350 feet south of the site. This population was calculated by counting houses within a 1-mile radius of the site and multiplying this number by a persons-per-household value of 2.89 for St. Clair County, Illinois (USGS 1954, 1954a, 1954b, 1954c; U.S. Bureau of the Census 1982).

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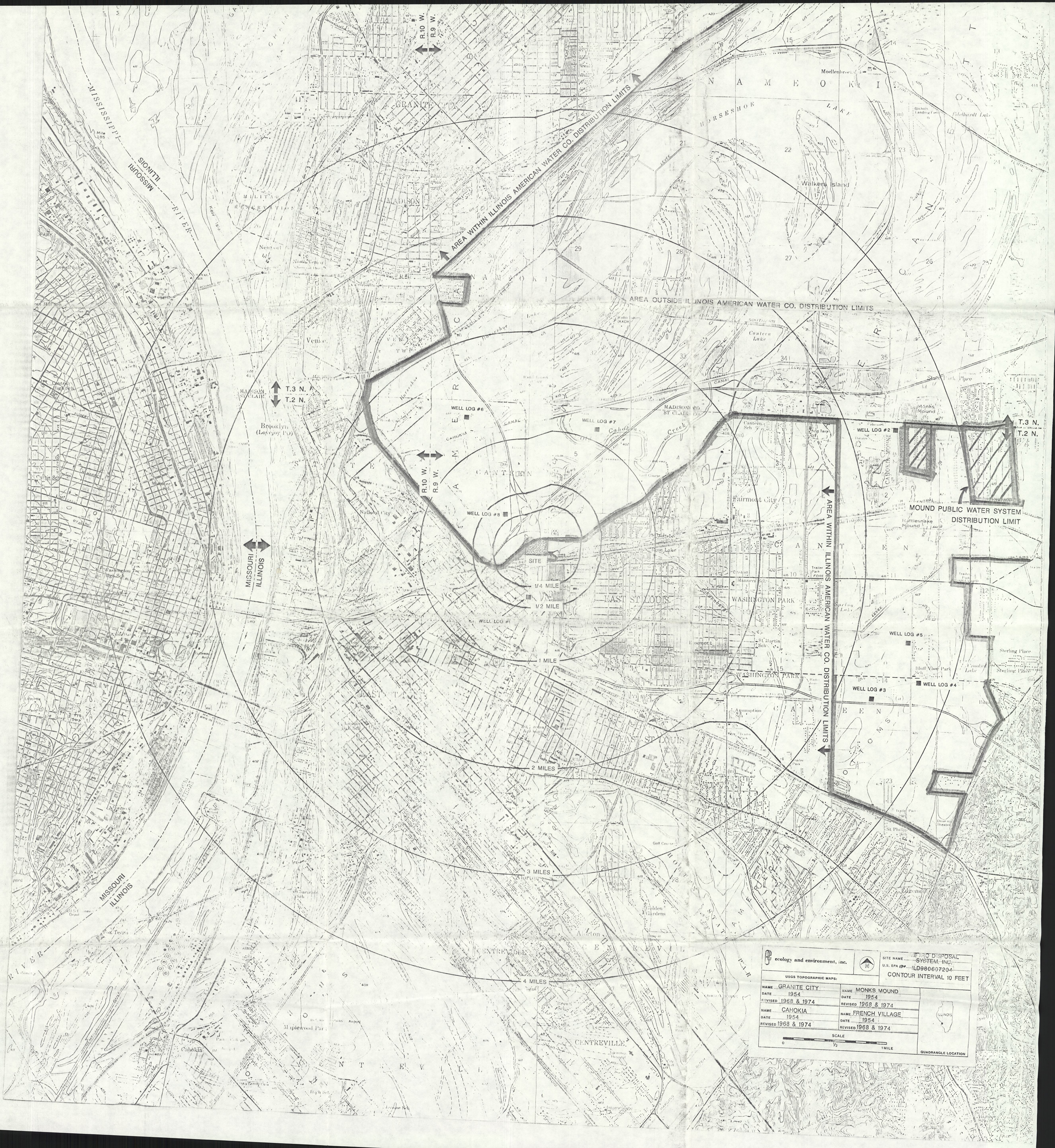
7522:9

APPENDIX A

SITE 4-MILE RADIUS MAP



AREA WITHIN ILLINOIS AMERICAN WATER CO. DISTRIBUTION LIMITS
AREA OUTSIDE ILLINOIS AMERICAN WATER CO. DISTRIBUTION LIMITS
AREA WITHIN ILLINOIS AMERICAN WATER CO. DISTRIBUTION LIMITS
MOUND PUBLIC WATER SYSTEM DISTRIBUTION LIMIT
SITE
1/4 MILE
1/2 MILE
1 MILE
2 MILES
3 MILES
4 MILES
WELL LOG #1
WELL LOG #2
WELL LOG #3
WELL LOG #4
WELL LOG #5
WELL LOG #6
WELL LOG #7
WELL LOG #8
R.10 W.
R.9 W.
T.3 N.
T.2 N.
MISSOURI
ILLINOIS
MISSISSIPPI
RIVER
GRANITE CITY
MADISON
Venice
Brooklyn (Lovejoy P.O.)
National City
EAST ST LOUIS
WASHINGTON PARK
Fairmont City
Monks Mound
Rattlesnake Mound
Walkers Island
HORSESHOE LAKE
Canteen Lake
MADISON CO
ST CLAIR CO
Cahokia
CENTREVILLE
Alorton
ecology and environment, inc.
SITE NAME METRO DISPOSAL SYSTEM, INC.
U.S. EPA ID# ILD980607204
CONTOUR INTERVAL 10 FEET
USGS TOPOGRAPHIC MAPS:
NAME GRANITE CITY
DATE 1954
REVISED 1968 & 1974
NAME MONKS MOUND
DATE 1954
REVISED 1968 & 1974
NAME CAHOKIA
DATE 1954
REVISED 1968 & 1974
NAME FRENCH VILLAGE
DATE 1954
REVISED 1968 & 1974
SCALE
0
1/2
1 MILE
ILLINOIS
QUADRANGLE LOCATION

0417SB

amera: 6
lm: 24
otographe
Direction

N
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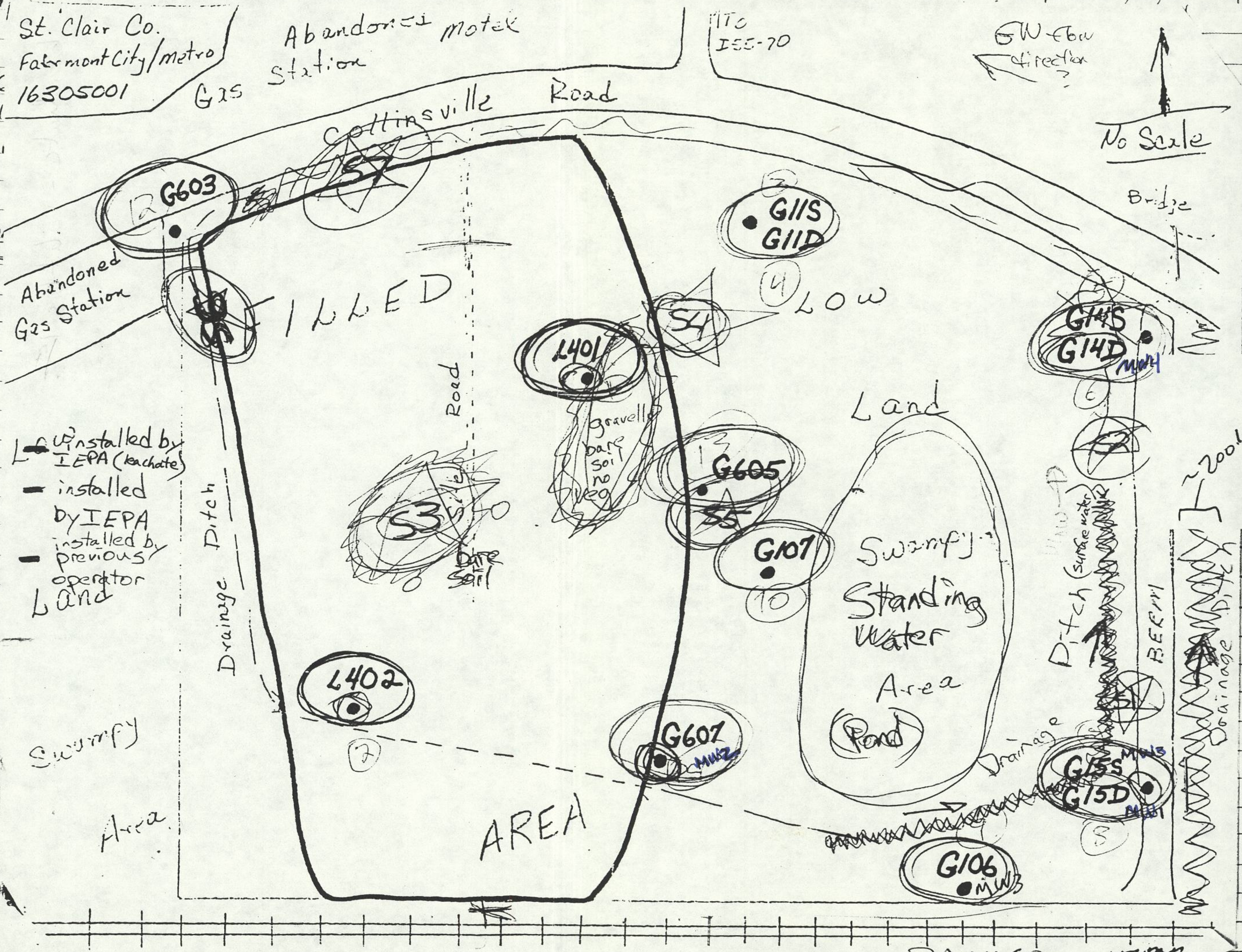
NE



5/8/91

ST. CLAIR CO.
SPRING 1990

2 - B

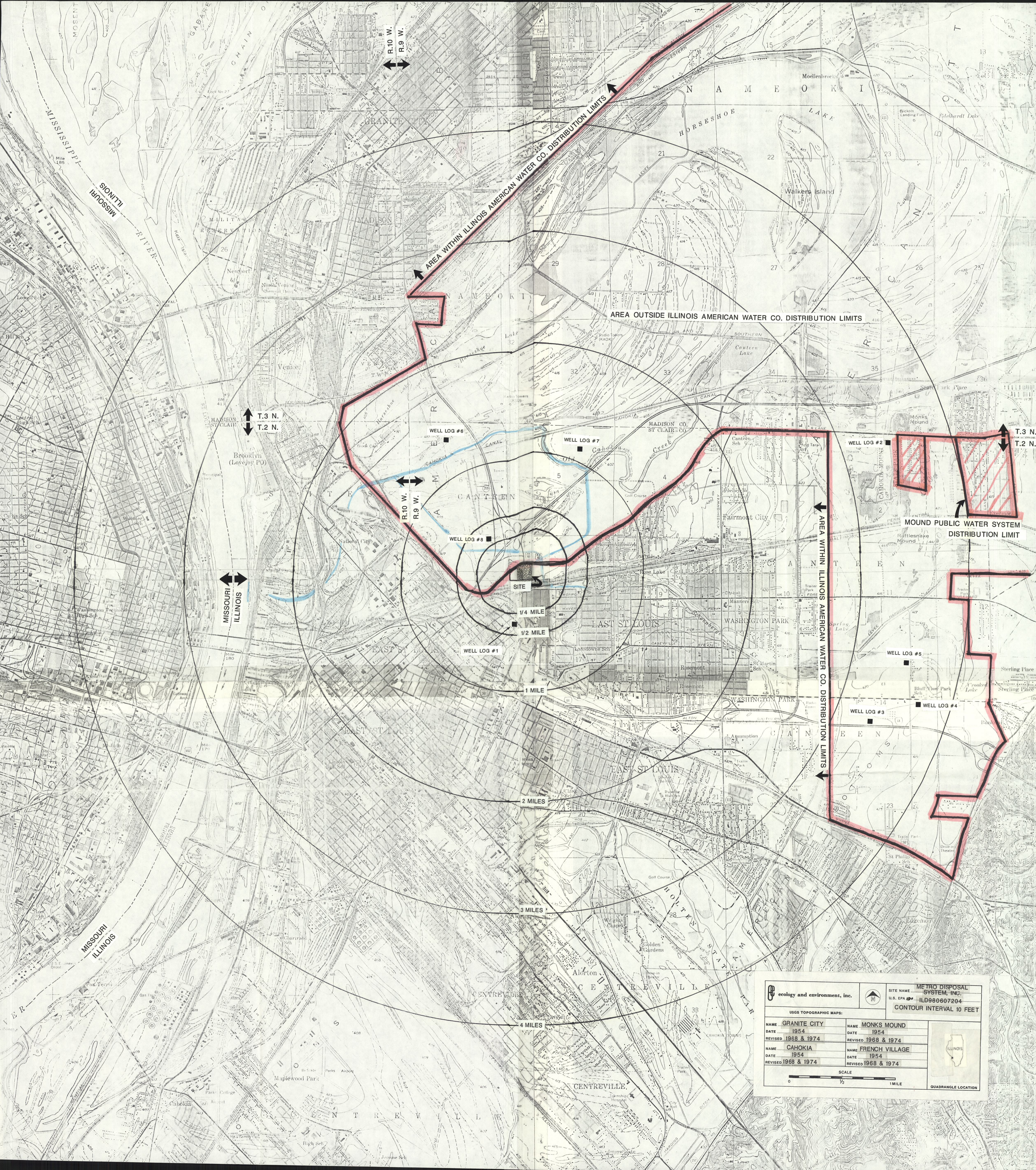
SCALE: 1" = 400'

EAST ST. LOUIS & CANTEEN TWP.

SECS. 5 & 8 & SURS. 622 & 777 T. 2N. R. 9W.

2 - B

ST. CLAIR CO. IL


AREA WITHIN ILLINOIS AMERICAN WATER CO. DISTRIBUTION LIMITS
AREA OUTSIDE ILLINOIS AMERICAN WATER CO. DISTRIBUTION LIMITS
AREA WITHIN ILLINOIS AMERICAN WATER CO. DISTRIBUTION LIMITS
MOUND PUBLIC WATER SYSTEM DISTRIBUTION LIMIT
R.10 W.
R.9 W.
T.3 N.
T.2 N.
MISSOURI
ILLINOIS
WELL LOG #1
WELL LOG #2
WELL LOG #3
WELL LOG #4
WELL LOG #5
WELL LOG #6
WELL LOG #7
WELL LOG #8
SITE
1/4 MILE
1/2 MILE
1 MILE
2 MILES
3 MILES
4 MILES
MISSISSIPPI RIVER
GRANITE CITY
MADISON
Venice
Brooklyn (Lovejoy PO)
National City
Fairmont City
EAST ST LOUIS
WASHINGTON PARK
Monks Mound
Canteen Lake
Walkers Island
HORSESHOE LAKE
CENTREVILLE
Alorton
Cahokia
Maplewood Park
ecology and environment, inc.
SITE NAME METRO DISPOSAL SYSTEM, INC.
U.S. EPA ID# ILD980607204
CONTOUR INTERVAL 10 FEET
USGS TOPOGRAPHIC MAPS:
NAME GRANITE CITY
DATE 1954
REVISED 1968 & 1974
NAME MONKS MOUND
DATE 1954
REVISED 1968 & 1974
NAME CAHOKIA
DATE 1954
REVISED 1968 & 1974
NAME FRENCH VILLAGE
DATE 1954
REVISED 1968 & 1974
SCALE
0
1/2
1 MILE
ILLINOIS
QUADRANGLE LOCATION

APPENDIX B

U.S. EPA FORM 2070-13

Site Inspection Report

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D980607204

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER					
METRO DISPL SYST INC.	ROUTE 3					
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**		**07 COUNTY CODE**	**08 CONG DIST**
FAIRMOUNT CITY	IL	61841	ST. CLAIR		163	23

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
38° 38' 26.0" N	089° 07' 15.0" W	■ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION — ALLEGED

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
5 / 8 / 91 (MONTH DAY YEAR)	☐ ACTIVE ■ INACTIVE	1970 (BEGINNING YEAR) 1974 (ENDING YEAR)

NOTE: Dumping of caustic label pulp continued until 1980.

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ■ B. EPA CONTRACTOR ECOLOGY & ENVIRONMENT INC (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
ED BELMONTE	WATER RESOURCE SPECIALIST	ECOLOGY & ENVIRONMENT	(312) 663-9415
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
DENEEN BENFORD	BIOLOGIST	E & E	(312) 663-9415
NATHAN RUSSELL	GEOLOGIST	E & E	(312) 663-9415
TIM RODRIGUEZ	BIOLOGIST	E & E	(312) 663-9415
KELLY MALEY	ZOOLOGIST	E & E	(312) 663-9415
CLIFF FLORCZAK	CHEMIST	E & E	(312) 663-9415
13 SITE REPRESENTATIVES INTERVIEWED	**14 TITLE**	**15 ADDRESS**	**16 TELEPHONE NO.**
TOM PENDERGAST	DIRECTOR OF ENV. SERVICES	6 PENN CENTER Philadelphia, PA	(215) 977-1685
MARK WARWICK	REAL ESTATE MANAGER	INDIANAPOLIS, IN	(317) 267-4157
—			( )
—			( )
—			( )
—			( )
—			

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	0940	MID 70s°F, SUNNY

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
ALAN ALTUR	U.S. EPA	(312) 886-0390

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
MARK WHEELER	U.S. EPA	E & E	312 663-9415	9 / 25 / 91 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D980607204

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [x] A. SOLID
- [ ] B. POWDER, FINES
- [ ] C. SLUDGE
- [ ] E. SLURRY
- [x] F. LIQUID
- [ ] G. GAS
- [x] D. OTHER PULP (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC FEET UNKNOWN
NO. OF DRUMS UNKNOWN

03 WASTE CHARACTERISTICS (Check all that apply)

- [x] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [x] D. PERSISTENT
- [x] E. SOLUBLE
- [ ] F. INFECTIOUS
- [x] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

- See Tables 4-1 and 4-2

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN		
OLW	OILY WASTE	UNKNOWN		See Sections 2-3, 4, 5
SOL	SOLVENTS	UNKNOWN		IN NARRATIVE
PSD	PESTICIDES	UNKNOWN		
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN		
IOC	INORGANIC CHEMICALS	UNKNOWN		
ACD	ACIDS	UNKNOWN		
BAS	BASES	UNKNOWN		
MES	HEAVY METALS	UNKNOWN		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	SEE TABLE 4-1 & 4-2, IN NARRATIVE				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT FILES, REGION V, CHICAGO, IL

E&E/FIT SITE INSPECTION, 1990.

EPA FORM 2070-13(7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D980607204

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 375
02 ■ OBSERVED (DATE: 5/8+9/91) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION FIT

See Section 5-2 in Narrative

01 ■ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: Ø
02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

See Section 5.3 of Narrative

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: NA
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

See Section 5-4 in NARRATIVE

01 ■ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: 17,654
02 ■ OBSERVED (DATE: 2-8-77 & 8-29-78.) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Two separate incidence of fires burning beneath the site have occured at the Metro site.
See Section 5-5 in Narrative.

01 ■ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: 6505
02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

See Section 5-6 in Narrative

01 ■ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 18 (ACRES)
02 ■ OBSERVED (DATE: 5-8-91) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

See Section 5-2 in Narrative.

01 ■ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 375
02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

See Section 5-2 in Narrative

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: Ø
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Site is inactive and there are no ON-site employees

01 ■ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: 6,505
02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Site is not restricted. population within a 1-mile radius of the site can potentially be injured or exposed if on-site because access to site is not restricted. See Section 5-6 in Narrative

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: ILD980607204

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ● J. DAMAGE TO FLORA — 02 ● OBSERVED (DATE: 8-29-78) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Damage to flora from on-site fire was observed by agents of IEPA. Instances of leachate on-site were also reported in the Illinois Pollution Control Board order against Metro Dspl Sys, Inc. on June 7, 1973. Discolored soils were observed

01 ● K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ● POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (include name(s) of species)
Although no damage to fauna was reported or observed a potential exists for fauna to become damaged by consuming contaminated flora or direct contact to TCL compounds and/or TAL analytes.

01 ● L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ● POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for food contamination through consumption of contaminated flora or fauna.

01 ● M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ● OBSERVED (DATE: July 21-22, 1971) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 17,654 — 04 NARRATIVE DESCRIPTION
IEPA observed yellow paint-like liquid, paper pulp, scum and brown bottle washing liquid in standing water on site. Leachate on-site was observed to flow off-site into a drainage ditch and eventually to The Mississippi River.

01 ● N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ● POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Leachate flowing off-site into nearby waterways.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None Documented or Observed.

01 ● P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ● ALLEGED
04 NARRATIVE DESCRIPTION — March 1973 - June 1980.
Site closed in 1973, but CERCLA 103c form filed w/ U.S. EPA by Anheuser-Busch, Inc. on June 9, 1981, indicates that caustic label pulp was shipped to the site from 1973 - 1980.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
Inadequate fencing.
Runoff of leachate to surface waters.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 17,654

IV. COMMENTS

NONE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT files, Region V, Chicago, IL.

E&E/FIT SITE INSPECTOR, 1991

EPA FORM 2070-13 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
FL	D980607204

II. PERMIT INFORMATION

01. TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
■ G. STATE (Specify)	UNKNOWN	1970	6-7-73	Permit was revoked by EPCB in 1973.
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
■ F. LANDFILL	UNKNOWN	UNKNOWN
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ■ H. OTHER NA (Specify)

05 OTHER

☐ A. BUILDINGS ON SITE

NONE

06 AREA OF SITE

2 1 8 (Acres)

07 COMMENTS

The site was used as a solid waste disposal facility, however, liquid caustic label pulp were disposed of at the site.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ■ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

No liner, no barriers to prevent surface water run-off and off-site leachate seepage.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ■ YES ☐ NO

02 COMMENTS

Site is not fenced and accessable to the public.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

E & E/FIT Files, Region IV

E&E/FIT SITE INSPECTION, 1991

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D980607204

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ■	B. ☐	A. ☐	B. ☐	C. ■	A. 1/4 (mi)
NON-COMMUNITY	C. ☐	D. ■	UNKNOWN D. ☐	E. ☐	F.	B. ~1/4 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

■ A. ONLY SOURCE FOR DRINKING | B. DRINKING (Other sources available); COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) | ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) | ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: 375

03 DISTANCE TO NEAREST DRINKING WATER WELL: ~1/4 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
11 (ft)	Regional flow is West Local flow is east & west	11 (ft)	Unknown (gpd)	☐ YES ■ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

See Section 5-2 in Narrative and Appendix E.

10 RECHARGE AREA		11 DISCHARGE AREA	
■ YES ☐ NO	COMMENTS: Recharged via rain water percolation.	■ YES ☐ NO	COMMENTS: Discharge to low lying wetlands on eastern half of the site.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

■ A. RESERVOIR, RECREATION, DRINKING WATER SOURCE | ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES | ☐ C. COMMERCIAL, INDUSTRIAL | ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Mississippi	☐	2.5 (mi)
Cahokia Canal	☐	1.5 (mi)
Schoenberger Creek	☐	150 feet (mi)
UNNAMED 0 RIVER	☐	1/4 MILE

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 6505 NO. OF PERSONS	B. 17,654 NO. OF PERSONS	C. 31,577 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 1/4 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
6108	300 ft (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is located north of the city of East St. Louis. Railroad tracks separate the site from residential areas. These Areas South of the site are more densly populated urban areas, with lands to the north of the site sparsely populated.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D980607204

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ■ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ■ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
~115 (ft)	unknown (ft)	unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
8 (in)	2.5 (in)	< 3 %	East	< 3 %

09 FLOOD POTENTIAL
SITE IS IN 100 YEAR FLOODPLAIN

10 N/A ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE: A. N/A (mi) OTHER: B. ON-SITE (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
¼ (mi)
ENDANGERED SPECIES: NA

13 LAND USE IN VICINITY

DISTANCE TO: (COMMERCIAL/INDUSTRIAL) (RESIDENTIAL AREAS) NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES; AGRICULTURAL LANDS: PRIME AG LAND, AG LAND

A. 300 ft (mi) B. 350 ft (mi) C. > 1 (mi) D. > 1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

See Sec. 3 in Narrative and Appendix A.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT FILES, REGION V,

E&E/FIT SITE INSPECTION, 1990.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D980607024

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	4 MW	TCL - PEI Associates, Cincinnati, Ohio TAL - Data Chem, Inc Salt Lake City/UT	available now
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	8	TCL - PEI Associates, Cincinnati OHIO TAL - Data Chem, Inc, Salt Lake City, UT	available now
VEGETATION			
OTHER Groundwater	2 Leachate Wells	TCL - PEI Associates, Cincinnati, Ohio TAL - Data Chem, Inc, Salt Lake City, UT	available now

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA 128	Methane above background when venting wells. No deviations in breathing zone
O2 / Explosimeter	No deviations from background
Radiation Monitor	No readings above background
Monitox	No deviations from background

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND ■ AERIAL

02 IN CUSTODY OF Ecology & Environment, Inc. Chicago IL
(Name of organization or individual)

03 MAPS ■ YES ☐ NO

04 LOCATION OF MAPS Ecology & Environment Chicago IL

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Physical description of soils samples
pH, conductivity, temperature of water samples.
Depth of well and depth to groundwater of monitoring well samples
Refer to Table 4-2 in report.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E SSI Logbook
E&E/FIT Files Region II
Laboratory Analytical Data.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
FC	D980607024

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Consolidated Rail (Conrail)		Six Penn Center		Philadelphia	PA	19103

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
N/A						

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
RAILROAD PENN CENTRAL		UNKNOWN				

IV. REALTY OWNER(S) (If applicable, list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
N/A						

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E SSI Logbook

E&E/FIT FILES Region IV.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D980607024

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE	08 YEARS OF OPERATION	09 NAME OF OWNER
N/A								

OPERATOR'S PARENT COMPANY (if applicable)

10 NAME	11 D+B NUMBER	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	14 CITY	15 STATE	16 ZIP CODE
N/A						

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE	08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
METRO DISPOSAL SYSTEMS, INC		207 Belleville National Bank Bldg.		Belleville	IL	62220	1970-1973	PENN CENTRAL R.R.

PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)

10 NAME	11 D+B NUMBER	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	14 CITY	15 STATE	16 ZIP CODE
N/A						

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E/FIT FILES, Region V

E&E/FIT Site Inspection, 1991

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D980607024

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Anheuser-Busch	NA	N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
721 Pestalozzi	NA		
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
St Louis	MO 63118		
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
UNKNOWN		NA	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
UNKNOWN		N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
NA		NA	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E&E FIT FILES REGION V

E&E SITE INSPECTION, 1991

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D980607024

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D980607804

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED | 02 DATE | 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ S. CAPPING/COVERING | 02 DATE | 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ T. BULK TANKAGE REPAIRED | 02 DATE | 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED | 02 DATE | 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ V. BOTTOM SEALED | 02 DATE | 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ W. GAS CONTROL | 02 DATE | 03 AGENCY
04 DESCRIPTION: N/A

01 ■ X. FIRE CONTROL | 02 DATE 2/14/77, 11/17/78 | 03 AGENCY Conrail
04 DESCRIPTION: Fires beneath surface of site. Soils were excavated and fires were extinguished. Soils were then recovered. Performed by Conrail Engineering Departments.

01 ☐ Y. LEACHATE TREATMENT | 02 DATE | 03 AGENCY
04 DESCRIPTION: NA

01 ☐ Z. AREA EVACUATED | 02 DATE | 03 AGENCY
04 DESCRIPTION: NA

01 ☐ 1. ACCESS TO SITE RESTRICTED | 02 DATE | 03 AGENCY
04 DESCRIPTION: NA

01 ☐ 2. POPULATION RELOCATED | 02 DATE | 03 AGENCY
04 DESCRIPTION: NA

01 ☐ 3. OTHER REMEDIAL ACTIVITIES | 02 DATE | 03 AGENCY
04 DESCRIPTION: NA

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E & E/FIT files Region I

E & E Site Inspection 1991

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD980607024

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ■ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

Order by Illinois Pollution Control Board (PCB 73-59) on June 8, 1973, Christian L. Moffett, Clerk, IPCB.

enforced The following actions:

① Revoked Metro Disposal Systems Inc's permit to operate a land fill at The site.

② Required final cover w/90 days of The order

③ Required Metro Disposal Systems Inc to cease and desist from violating rules and regs regarding refuse disposal.

④ A $2,500 penality to The State of Illinois.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E!E/FIT files Region V.

E!E Site Inspection 1991

EPA FORM 2070-13 (7-81)

APPENDIX C

FIT SITE PHOTOGRAPHS

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 1 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: > 1230

DIRECTION OF PHOTOGRAPH:
> North

WEATHER CONDITIONS:
> Pleasant
> Mid 70's sunny

PHOTOGRAPHED BY:
> Belmonte

SAMPLE ID (if applicable):
> S1

DESCRIPTION: > Close-up view of sediment sample S1 collected from
> the west edge of the berm on the sites east side.

DATE: > 5/8/91

TIME: > 12:30

DIRECTION OF PHOTOGRAPH:
> North

WEATHER CONDITIONS:
> Sunny, mid 70's
>

PHOTOGRAPHED BY:
> Belmonte

SAMPLE ID (if applicable):
> S1

DESCRIPTION: > Perspective view of sediment sample S1.
>

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 2 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: > 12:45

DIRECTION OF PHOTOGRAPH:
> West

WEATHER CONDITIONS:
> Sunny, mild
> 270°

PHOTOGRAPHED BY:
> Belmonte

SAMPLE ID (if applicable):
> S2

DESCRIPTION: > Close-up view of sediment sample S2 collected
> from the west edge of the berm on the east side of the site.

DATE: > 5/8/91

TIME: > 12:45

DIRECTION OF PHOTOGRAPH:
> West

WEATHER CONDITIONS:
> Sunny, mild
> 70s

PHOTOGRAPHED BY:
> Belmonte

SAMPLE ID (if applicable):
> S2

DESCRIPTION: > Perspective view of Sediment Sample S2.
>

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 3 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: >

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Sunny mild

> ~70°

PHOTOGRAPHED BY: > Delmonte

SAMPLE ID (if applicable): > S3

DESCRIPTION: > Close up of soil sample S3 collected from an

> area of bare soil on top of the landfill.

DATE: > 5/8/91

TIME: > 1340

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Sunny mild

> ~70°

PHOTOGRAPHED BY: > Delmonte

SAMPLE ID (if applicable): > S3

DESCRIPTION: > Perspective view of soil sample S3

>

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 4 OF 22

U.S. EPA ID: ILD 980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: > 1355

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Sunny, mild

> ~70°

PHOTOGRAPHED BY: > Selmonte

SAMPLE ID (if applicable): > S4

DESCRIPTION: > Close-up view of soil sample S4 collected from red stained soil on the eastern edge of the landfill.

DATE: > 5/8/91

TIME: > 350

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Sunny, mild

> ~70°

PHOTOGRAPHED BY: > Selmonte

SAMPLE ID (if applicable): > S4

DESCRIPTION: > Perspective view of soil sample S4

>

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 5 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FILC4175B

DATE: > 5/8/91

TIME: > 13:50

DIRECTION OF PHOTOGRAPH: > East

WEATHER CONDITIONS: > Sunny, mild

> ~70°

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > S4

DESCRIPTION: > Perspective view of soil sample S4 > showing wetland west of sample location

DATE: > 5/8/91

TIME: > 14:12

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Sunny, mild

> ~70°

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > S5

DESCRIPTION: > Close-up view of soil sample S5 collected > from the western edge of the landfill in the northwest corner of the landfill

PIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 6 OF 22

U.S. EPA ID: ILD 980607204 TDD: F05-8912-090 PAN: FILO4175R

DATE: > 5/8/91

TIME: > 14:12

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Sunny, mild

> ~70°

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > SS

DESCRIPTION: > Perspective view of soil sample SS.

>

DATE: > 5/8/91

TIME: > 14:12

DIRECTION OF PHOTOGRAPH: > North east

WEATHER CONDITIONS: > Sunny, mild

> ~70°

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > SS

DESCRIPTION: > Perspective view of wetlands Northeast

> of SS

PIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl SYST INC PAGE 1 OF 22

U.S. EPA ID: ILD 980607204 TDD: F05-8912-090 PAN: FIL04,7SB

DATE: > 5/8/91

TIME: > 13:04

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Sunny, mild

> ~70°

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > S6

DESCRIPTION: > Close-up view of soil sample S6,

> Collected at the wetland/landfill interface

DATE: > 5/8/91

TIME: > 13:04

DIRECTION OF PHOTOGRAPH: > Northwest

WEATHER CONDITIONS: > Sunny, Mild

> ~70°

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > S6

DESCRIPTION: > Perspective view of soil sample

> S6.

PIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 8 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: > 15:15

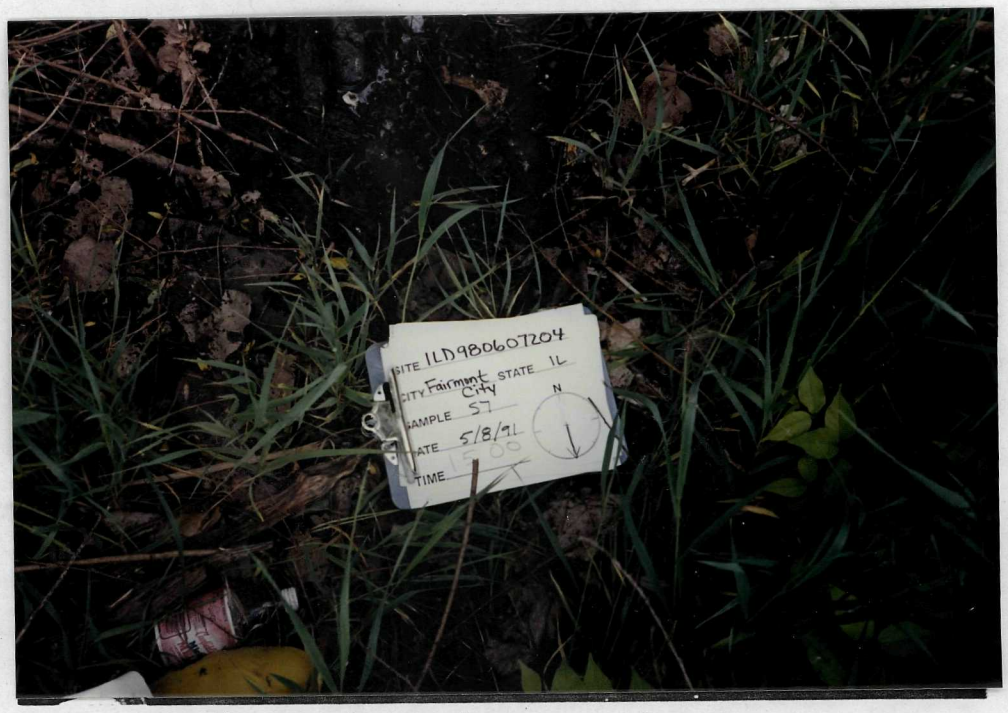
DIRECTION OF PHOTOGRAPH: > South

WEATHER CONDITIONS: > MH, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > S7.



DESCRIPTION: > Close-up view of sediment Sample S7,
> Collected between the landfill and Highway 40.

DATE: > 5/8/91

TIME: > 15:15

DIRECTION OF PHOTOGRAPH: > South

WEATHER CONDITIONS: > MH, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > S7

DESCRIPTION: > Perspective view of sediment Sample
> S7.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 4 OF 22

U.S. EPA ID: ILD 980607204 TDD: F05-8912-090 PAN: FILC417SB

DATE: > 5/8/91

TIME: > 18:15

DIRECTION OF PHOTOGRAPH: > West

WEATHER CONDITIONS: > Mild ~ 70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > SB

DESCRIPTION: > Close-up view of SB, the potential background, collected from a wooded area east of the site.

DATE: > 5/8/91

TIME: > 18:15

DIRECTION OF PHOTOGRAPH: > West

WEATHER CONDITIONS: > Mild, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > SB

DESCRIPTION: > Perspective view of SB, the potential background Sample.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: METRO DISP. SYST. INC PAGE 10 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: > 16:00

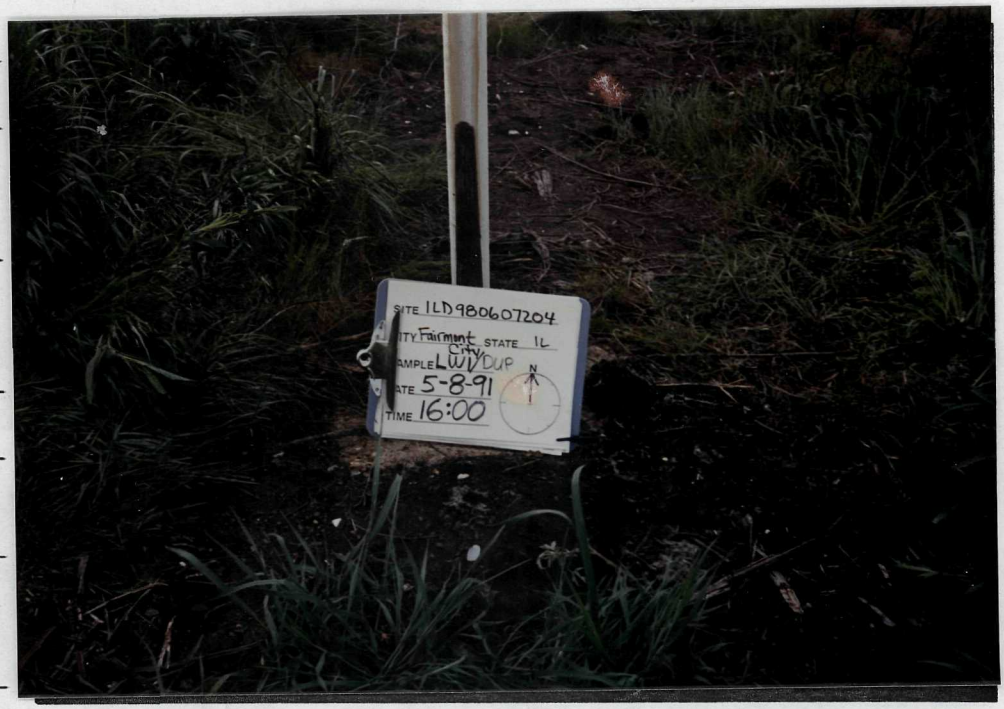
DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Mild, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > LW1 / Dup



DESCRIPTION: > Close-up view of leachate well sample > LW1 located at the southwest corner of the landfill

DATE: > 5/8/91

TIME: > 16:00

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Mild, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > LW1

DESCRIPTION: > Perspective view of leachate well > LW1

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 11 OF 22

U.S. EPA ID: ILD980607204 TDD: FCS-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: > 16:00

DIRECTION OF PHOTOGRAPH: > Northeast

WEATHER CONDITIONS: > Mild, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > LW1 / Dup

DESCRIPTION: > Perspective view of leachate well, LW1.

> Entrance ramp to I55 & Hwy 70 in background.

DATE: > 5/8/91

TIME: > 16:45

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Mild, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > LW2 / MSD

DESCRIPTION: > Close-up view of leachate well, LW2.

> LW2 was collected on the east side of the landfill.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 12 OF 22

U.S. EPA ID: ILD 980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/8/91

TIME: > 16:45

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > Mild, ~70'

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > LW2/MSD

DESCRIPTION: > Perspective view of LW2, located on the

> southwest corner of the fill area.

DATE: > 5/8/91

TIME: > 16:45

DIRECTION OF PHOTOGRAPH: > South

WEATHER CONDITIONS: > Mild, ~70°

>

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > LW2/MSD

DESCRIPTION: > Perspective view of leachate well,

> LW2. Railroad tracks in background.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Disc Syst Inc PAGE 13 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175R

DATE: > 5/9/91

TIME: > 11:30

DIRECTION OF PHOTOGRAPH: > West

WEATHER CONDITIONS: > overcast, mild

> mild mid-60's

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW1 / Dup

DESCRIPTION: > Close-up view of monitoring well sample, MW1. MW1 was located on the berm in the southeast corner of the site.

DATE: > 5/9/91

TIME: > 11:30

DIRECTION OF PHOTOGRAPH: > West

WEATHER CONDITIONS: > overcast, mild

> mid-60's

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW1 / Dup

DESCRIPTION: > Perspective view of monitoring well MW1.

> MW3 is left of MW1.

PIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl SYST INC PAGE 1 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/9/91

TIME: > 10:20

DIRECTION OF PHOTOGRAPH:
> South

WEATHER CONDITIONS:
> Overcast, mild
> mid-60's

PHOTOGRAPHED BY:
> Belmonte

SAMPLE ID (if applicable):
> MW2/MSD

DESCRIPTION: > Close-up view of MW2/MSD collected
> southwest of the landfill.

DATE: > 5/9/91

TIME: > 10:20

DIRECTION OF PHOTOGRAPH:
> South

WEATHER CONDITIONS:
> Overcast, mild
> mid-60's

PHOTOGRAPHED BY:
> Belmonte

SAMPLE ID (if applicable):
> MW2/MSD

DESCRIPTION: > Perspective view of MW2/MSD. Railroad
> tracks on the horizon.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 15 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/9/91

TIME: > 0:20

DIRECTION OF PHOTOGRAPH: > South west

WEATHER CONDITIONS: > overcast, mild

> mid-60's

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW2 MSD

DESCRIPTION: > Perspective view of MW2/MSD. showing the

> southeast corner of the landfill.

DATE: > 5/9/91

TIME: > 2:30

DIRECTION OF PHOTOGRAPH: > West

WEATHER CONDITIONS: > overcast, mild

> Mid-60's

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW3

DESCRIPTION: > Close-up view of MW3 collected in

> the southeast corner of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 16 OF 22

U.S. EPA ID: ILD 980607204 TDD: F05-8912-090 PAN: FIL04I7513

DATE: > 5/9/91

TIME: > 12:30

DIRECTION OF PHOTOGRAPH: > West

WEATHER CONDITIONS: > overcast, mild

> mid-60s

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW3

DESCRIPTION: > Perspective view of MW3. MW1 is to

> the right.

DATE: > 5/9/91

TIME: > 13:35

DIRECTION OF PHOTOGRAPH: > North

WEATHER CONDITIONS: > overcast, mild

> mid-60s

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW1/MW3

DESCRIPTION: > Perspective view of MW1 and MW3 showing

> the Hwy 203 bridge in the background.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 17 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: FIL041758

DATE: > 5/9/91

TIME: > 12:00

DIRECTION OF PHOTOGRAPH: > South

WEATHER CONDITIONS: > overcast, mild

> mic-60s

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW4

DESCRIPTION: > Close-up view of monitoring well sample MW4 > located in the northeast corner of the site.

DATE: > 5/9/91

TIME: > 12:00

DIRECTION OF PHOTOGRAPH: > South

WEATHER CONDITIONS: > overcast, mild

> mic-60s

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > MW4

DESCRIPTION: > Perspective view of MW4 showing length > of berm.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst Inc PAGE 18 OF 22

U.S. EPA ID: ILD 980607204 TDD: F05-8912-090 PAN: FIL04175B

DATE: > 5/9/91

TIME: > 3:50

DIRECTION OF PHOTOGRAPH: > South

WEATHER CONDITIONS: > overcast,

> mild, mid-60s

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > N/A

DESCRIPTION: > On-site well G-14S is broken off at

> its base.

DATE: > 5/9/91

TIME: > 3:58

DIRECTION OF PHOTOGRAPH: > west

WEATHER CONDITIONS: > Overcast, mild

> Mid-60's.

PHOTOGRAPHED BY: > Belmonte

SAMPLE ID (if applicable): > N/A

DESCRIPTION: > Abandonned gas station adjacent to the western

> border of the landfill on Collinsville Road.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: METRO DSPL SYST INC. PAGE 19 OF 22

U.S. EPA ID: ILD980600204 TDD: 705-892-090 PAN: F1L04175B

DATE: >5/9/91 TIME: >10:55 DIRECTION OF PHOTOGRAPH: >East to North PHOTOGRAPHED BY: > Belmonte

WEATHER CONDITIONS: > Overcast, mild, mid-60's SAMPLE ID (if applicable): > N/A.

DESCRIPTION: > Perspective view of southern border of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Metro Dspl Syst, Inc PAGE 20 OF 22

U.S. EPA ID: ILD980607204 TDD: F-05-8912-090 PAN: FILO417SB

DATE: > 5/9/91 TIME: > 10:58 DIRECTION OF PHOTOGRAPH: > N/NW PHOTOGRAPHED BY: > Belmonte

WEATHER CONDITIONS: > Overcast, Mild, mid-60s . SAMPLE ID (if applicable): > N/A

DESCRIPTION: > Perspective view of southern border of the site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: METRO DSPL SYST INC. PAGE 2 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: F1L04175B

DATE: > 5/9/91 TIME: > 14:00 DIRECTION OF PHOTOGRAPH: > South PHOTOGRAPHED BY: > Belmonte

WEATHER CONDITIONS: > Overcast, Mild, mid-60s SAMPLE ID (if applicable): > N/A

DESCRIPTION: > Perspective view of landfill and wetlands taken from Hwy 203 on the sites north boundary.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: METRO DSPL SYST INC. PAGE 22 OF 22

U.S. EPA ID: ILD980607204 TDD: F05-8912-090 PAN: F1604175B

DATE: > 5/9/91 TIME: > 13:55 DIRECTION OF PHOTOGRAPH: > West PHOTOGRAPHED BY: > Belmonte

WEATHER CONDITIONS: > Overcast, mild, mid-60s SAMPLE ID (if applicable): > N/A.

DESCRIPTION: > Perspective view of abandoned gas station and motel. Photo taken north of Collinsville Rd.

APPENDIX D

U.S. EPA TARGET COMPOUND LIST AND TARGET ANALYTE LIST QUANTITATION/DETECTION LIMITS

ROUTINE ANALYTICAL SERVICES

CONTRACT REQUIRED DETECTION AND QUANTITATION LIMITS

Contract Laboratory Program
Target Compound List
Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Chloromethane	74-87-3	10 ug/L	10 ug/Kg
Bromomethane	74-83-9	10	10
Vinyl chloride	75-01-4	10	10
Chloroethane	75-00-3	10	10
Methylene chloride	75-09-2	5	5
Acetone	67-64-1	10	5
Carbon disulfide	75-15-0	5	5
1,1-dichloroethene	75-35-4	5	5
1,1-dichloroethane	75-34-3	5	5
1,2-dichloroethene (total)	540-59-0	5	5
Chloroform	67-66-3	5	5
1,2-dichloroethane	107-06-2	5	5
2-butanone (MEK)	78-93-3	10	10
1,1,1-trichloroethane	71-55-6	5	5
Carbon tetrachloride	56-23-5	5	5
Vinyl acetate	108-05-4	10	10
Bromodichloromethane	75-27-4	5	5
1,2-dichloropropane	78-87-5	5	5
cis-1,3-dichloropropene	10061-01-5	5	5
Trichloroethene	79-01-6	5	5
Dibromochloromethane	124-48-1	5	5
1,1,2-trichloroethane	79-00-5	5	5
Benzene	71-43-2	5	5
Trans-1,3-dichloropropene	10061-02-6	5	5
Bromoform	75-25-2	5	5
4-Methyl-2-pentanone	108-10-1	10	10
2-Hexanone	591-78-6	10	10
Tetrachloroethene	127-18-4	5	5
Tolene	108-88-3	5	5
1,1,2,2-tetrachloroethane	79-34-5	5	5
Chlorobenzene	108-90-7	5	5
Ethyl benzene	100-41-4	5	5
Styrene	100-42-5	5	5
Xylenes (total)	1330-20-7	5	5

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Phenol	108-95-2	10 ug/L	330 ug/Kg
bis(2-Chloroethyl) ether	111-44-4	10	330
2-Chlorophenol	95-57-8	10	330
1,3-Dichlorobenzene	541-73-1	10	330
1,4-Dichlorobenzene	106-46-7	10	330
Benzyl Alcohol	100-51-6	10	330
1,2-Dichlorobenzene	95-50-1	10	330
2-Methylphenol	95-48-7	10	330
bis(2-Chloroisopropyl) ether	108-60-1	10	330
4-Methylphenol	106-44-5	10	330
N-Nitroso-di-n-dipropylamine	621-64-7	10	330
Hexachloroethane	67-72-1	10	330
Nitrobenzene	98-95-3	10	330
Isophorone	78-59-1	10	330
2-Nitrophenol	88-75-5	10	330
2,4-Dimethylphenol	105-67-9	10	330
Benzoic Acid	65-85-0	50	1600
bis(2-Chloroethoxy) methane	111-91-1	10	330
2,4-Dichlorophenol	120-83-2	10	330
1,2,4-Trichlorobenzene	120-82-1	10	330
Naphthalene	91-20-3	10	330
4-Chloroaniline	106-47-8	10	330
Hexachlorobutadiene	87-68-3	10	300
4-Chloro-3-methylphenol	59-50-7	10	330
2-Methylnaphthalene	91-57-6	10	330
Hexachlorocyclopentadiene	77-47-4	10	330
2,4,6-Trichlorophenol	88-06-2	10	330
2,4,5-Trichlorophenol	95-95-4	50	1600
2-Chloronaphthalene	91-58-7	10	330
2-Nitroaniline	88-74-4	50	1600
Dimethylphthalate	131-11-3	10	330
Acenaphthylene	208-96-8	10	330
2,6-Dinitrotoluene	606-20-2	10	330
3-Nitroaniline	99-09-2	50	1600
Acenaphthene	83-32-9	10	330
2,4-Dinitrophenol	51-28-5	50	1600
4-Nitrophenol	100-02-7	50	1600
Dibenzofuran	132-64-9	10	330
2,4-Dinitrotoluene	121-14-2	10	330
Diethylphthalate	84-66-2	10	330
4-Chlorophenyl-phenyl ether	7005-72-3	10	330

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SLUDGE SEDIMENT
Fluorene	86-73-7	10 ug/L	330 ug/Kg
4-Nitroaniline	100-01-6	50	1600
4,6-Dinitro-2-methylphenol	534-52-1	50	1600
N-nitrosodiphenylamine	86-30-6	10	330
4-Bromophenyl-phenylether	101-55-3	10	330
Hexachlorobenzene	118-74-1	10	330
Pentachlorophenol	87-86-5	50	1600
Phenanthrene	85-01-8	10	330
Anthracene	120-12-7	10	330
Di-n-butylphthalate	84-74-2	10	330
Fluoranthene	206-44-0	10	330
Pyrene	129-00-0	10	330
Butylbenzylphthalate	85-68-7	10	330
3,3'-Dichlorobenzidine	91-94-1	20	660
Benzo(a)anthracene	56-55-3	10	330
Chrysene	218-01-9	10	330
bis(2-Ethylhexyl)phthalate	117-81-7	10	330
Di-n-octylphthalate	117-84-0	10	330
Benzo(b)fluoranthene	205-99-2	10	330
Benzo(k)fluoranthene	207-08-9	10	330
Benzo(a)pyrene	50-32-8	10	330
Indeno(1,2,3-cd)pyrene	193-39-5	10	330
Dibenz(a,h)anthracene	53-70-3	10	330
Benzo(g,h,i)perylene	191-24-2	10	330

Table A
Contract Laboratory Program
Target Compound List
Pesticide and PCB Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
alpha-BHC	319-84-6	0.05 ug/L	8 ug/Kg
beta-BHC	319-85-7	0.05	8
delta-BHC	319-86-8	0.05	8
gamma-BHC (Lindane)	58-89-9	0.05	8
Heptachlor	76-44-8	0.05	8
Aldrin	309-00-2	0.05	8
Heptachlor epoxide	1024-57-3	0.05	8
Endosulfan I	959-98-8	0.05	8
Dieldrin	60-57-1	0.10	16
4,4'-DDE	72-55-9	0.10	16
Endrin	72-20-8	0.10	16
Endosulfan II	33213-65-9	0.10	16
4,4'-DDD	72-54-8	0.10	16
Endosulfan sulfate	1031-07-8	0.10	16
4,4'-DDT	50-29-3	0.10	16
Methoxychlor (Mariate)	72-43-5	0.5	80
Endrin ketone	53494-70-5	0.10	16
alpha-Chlordane	5103-71-9	0.5	80
gamma-chlordane	5103-74-2	0.5	80
Toxaphene	8001-35-2	1.0	160
AROCLOR-1016	12674-11-2	0.5	80
AROCLOR-1221	11104-28-2	0.5	80
AROCLOR-1232	11141-16-5	0.5	80
AROCLOR-1242	53469-21-9	0.5	80
AROCLOR-1248	12672-29-6	0.5	80
AROCLOR-1254	11097-69-1	1.0	160
AROCLOR-1260	11096-82-5	1.0	160

Table A
(Cont.)

CONTRACT LABORATORY PROGRAM
TARGET ANALYTE LIST
INORGANIC DETECTION LIMITS

Compound	Procedure	Water (µg/L)	Soil Sediment Sludge (mg/kg)
aluminum	ICP	200	40
antimony	furnace	60	2.4
arsenic	furnace	10	2
barium	ICP	200	40
beryllium	ICP	5	1
cadmium	ICP	5	1
calcium	ICP	5,000	1,000
chromium	ICP	10	2
cobalt	ICP	50	10
copper	ICP	25	5
iron	ICP	100	20
lead	furnace	3	1
magnesium	ICP	5,000	1,000
manganese	ICP	15	3
mercury	cold vapor	0.2	0.008
nickel	ICP	40	8
potassium	ICP	5,000	1,000
selenium	furnace	5	1
silver	ICP	10	2
sodium	ICP	5,000	1,000
thallium	furnace	10	2
tin	ICP	40	8
vanadium	ICP	50	10
zinc	ICP	20	4
cyanide	color	10	2

APPENDIX E

WELL LOGS OF THE AREA OF THE SITE

White – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILE ALL APPLICATIONS FOR PERMITS AND ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

T2N R9W

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material _____. Buried Slab: Yes____No____
   b. Driven _____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled X. Finished in Drift X. In Rock____.
   Tubular _____. Gravel Packed X.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Ready mix	0	30

2. Distance to Nearest:
   Building _____ Ft. Seepage Tile Field _____
   Cess Pool _____ Sewer (non Cast iron) _____
   Privy _____ Sewer (Cast iron) _____
   Septic Tank _____ Barnyard _____
   Leaching Pit _____ Manure Pile _____
3. Well furnishes water for human consumption? Yes____No X
4. Date well completed Nov. 1983
5. Permanent Pump Installed? Yes Date 11/23/83 No____
   Manufacturer Layne Type Trbn Location _____
   Capacity 1500 gpm. Depth of Setting 60 Ft.
6. Well Top Sealed? Yes X No____Type cement
7. Pitless Adapter Installed? Yes____No X
   Manufacturer _____ Model Number _____
   How attached to casing? _____
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes X No____
10. Pressure Tank Size____gal. Type _____
    Location _____
11. Water Sample Submitted? Yes____No X

REMARKS:

IDPH 4.063
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Pfizer, Inc. Well No. 15
    Address East St. Louis, Illinois
    Driller John Ruester License No. 102-002045
11. Permit No. 109867 Date 10/7/83
12. Water from Alluvial (Formation)
    at depth 80 to 115 ft.
13. County St. Clair
    Sec. 8 ¼a
    Twp. 2N
    Rge. 9W
    Elev. _____
14. Screen: Diam. 18 in.
    Length: 35 ft. Slot #6

SHOW LOCATION IN SECTION PLAT
400'N-125'E SW/c

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
18	stainless	+2	80
48	Carbon stl 0.375"	0	30

16. Size Hole below casing: 54 in.
17. Static level 30 ft. below casing top which is 2 ft. above ground level. Pumping level 43.6 ft. when pumping at 1500 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Cinders	1	1
Rubble fill	5	6
Gray clay & brown clay	6	12
Fine brown sand	14	26
Gray fine to medium sand	49	75
Gray med. to coarse sand & grvl	15	90
Gray coarse sand & boulders	25.5	115.5
Shale	1	116.5

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED _____ DATE 2/6/84

WELL LOG #1

Could be in Columbia Mo WELL LOG #2

John C. Moore Corporation, Rochester, N. Y. Bidder and holes in leaves, each Patented 1901. 377266

TOWN TOWNSHIP Map No. 4
COMPANY No. R. 9 W
FARM Monks Mound No. 1 T Sec. 2
AUTHORITY Sample Study by Weller 27
ELEVATION 419
COLLECTOR DATE DRILLED
CONFIDENTIAL
NW cor NW NE.

No.	STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Quaternary				
	Fine gray sand	20		60	
	Coarse river sand	10		70	
	Gravel, one-inch shell, worn	80		150	267
	Penn.			to bedrock	
	Gray shale, faintly calcareous	55		205	
	Total depth			210	

STC 2NW2.4h

County St. Clair Index No. 0402
DRILL RECORD

(7-5M-11-31) Illinois Geological Survey, Urbana.

Walker

WELL LOG #3

FRANK G. TOJO
7600 Caseyville Road
St. Clair County

Well Number..... No.1

Owned by..... Frank G. Tojo
7600 Caseyville Road, East St. Louis

Date drilled..... September 17, 1964

Drilled by..... Luhr Bros. Inc. Columbia, Illinois

Depth of hole..... 116.7 ft below ground surface.

Diameter of hole... 32 inches

Depth of well..... 116 ft below ground surface.

Casing..... 83 feet of 16-inch steel pipe. Top of casing extends 3 feet above ground surface.

Screen..... 36 feet of Doerr, 16-inch screen with bottom set at 116 feet below ground surface. Gravel-packed with Merramec gravel.

Location of well... 150 feet North of Old Caseyville Road and 150 feet South of Harding Ditch, approximately 1450 feet East and 225 feet South of the North-west corner of Section 14 T.2 N. R.9 W.

Log of well..... As classified by the driller:
0 to 15 feet. Clay
15 to 20 feet. Fine sand, gray.
20 to 25 feet. Coarse sand with 1/4" gravel.
25 to 30 feet. Clay, silty, with very coarse sand.
30 to 35 feet. Sand with some clay.
35 to 116.5 feet. Coarse sand with gray clay lenz.

Pump..... Permanent pump has been installed. It is a Worthington turbine, powered by an Allis Chalmers, butane, engine. 67'
The pump setting is as follows:
40 feet of 8-inch column pipe.
4 feet of 3stage, 12-inch bowl assembly.
10 feet of 8-inch tail pipe.
54 feet total length of pump setting.

Static level..... 16.77 feet (when drilled as reported by the driller)

Pumping level..... 28.87 feet (when drilled as reported by the driller) This level was after pumping at 1270 gpm but the length of time pumped is not known.

Well used for..... Mr. Tojo raises fish for bait and uses the well to supply water to two ponds, one is of 1 acre surface and the other is 2 1/2 acre surface.
A water sample was collected January 22, 1966 for mineral, analysis. The sample expressed to State Water Survey Laboratory, Champaign, Illinois.

E. H. Jones

INSTRUCTIONS TO DRILLERS

White Copy – Ill. Dept. of P. Health
Yellow Copy – W Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUEST AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 516, ST. [illegible] OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth 63 ft.
   Curb material _____. Buried Slab: Yes_____No_____
   b. Driven_____. Drive Pipe Diam._____in. Depth_____ft.
   c. Drilled X. Finished in Drift_____. In Rock_____.
   Tubular_____. Gravel Packed_____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building_____Ft. Seepage Tile Field_____
   Cess Pool_____ Sewer (non Cast Iron)_____
   Privy_____ Sewer (Cast Iron)_____
   Septic Tank_____ Barnyard_____
   Leaching Pit_____ Manure Pile_____
3. Is water from this well to be used for human consumption?
   Yes_____No_____
4. Date well completed Nov 15
5. Permanent Pump Installed? Yes_____No X
   Manufacturer_____Type_____
   Capacity_____gpm. Depth of setting_____ft.
6. Well Top Sealed? Yes X No_____
7. Pitless Adaptor Installed? Yes_____No_____
8. Well Disinfected? Yes X No_____
9. Water Sample Submitted? Yes X No_____

REMARKS:

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner: Thomas A Bagley (9 Florence) Well No._____
    Address 1900 Duncan Road
    Driller D+S Drilling. License No._____
11. Permit No. 26727 Date Nov 27 1973
12. Water from Loose Sand (Formation) 13. County St Clair
    at depth 12 to 63 ft. Sec. 14 NW
14. Screen: Diam. 4 in. Twp. 2N
    Length: 5 ft. Slot_____ Rge. 9W
    Elev._____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6¼	16	0	63

SHOW LOCATION IN SECTION PLAT
N E N W S E

16. Size Hole below casing: 6¼ in.
17. Static level 12 ft. below casing top which is_____ft. above ground level. Pumping level 15 ft. when pumping at 10 gpm for 10 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Overburden	12	12
Loose sand	51	63

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED_____ DATE_____

WELL LOG #4

White Copy – Ill. Dept. of Pub. Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUIRED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ✓.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Drill Cuttings	0	15

2. Distance to Nearest:
   Building Solid Ft. — Seepage Tile Field —
   Cess Pool — — Sewer (non Cast Iron) —
   Privy — — Sewer (Cast Iron) —
   Septic Tank — — Barnyard —
   Leaching Pit — — Manure Pile —
3. Well furnishes water for human consumption? Yes ____ No ✓
4. Date well completed 5-15-85
5. Permanent Pump Installed? Yes ____ Date ____ No ✓
   Manufacturer ____ Type ____ Location ____
   Capacity ____ gpm. Depth of Setting ____ Ft.
6. Well Top Sealed? Yes ✓ No ____ Type Steel Cap
7. Pitless Adapter Installed? Yes ____ No ✓
   Manufacturer ____ Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ____ No ✓
10. Pressure Tank Size ____ gal. Type ____
    Location ____
11. Water Sample Submitted? Yes ____ No ✓

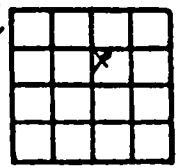
REMARKS:

County # 25671

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Bluff View Farms Well No. 1
    Address 8410 Locust Blvd. Cahokia, IL 62206
    Driller Daniel K. McCord License No. 092-006764
11. Permit No. 116771 Date 3-12-85
12. Water from Sand & Gravel Formation 13. County St. Clair
    at depth 58 to 118 ft. Sec. 14 NE
14. Screen: Diam. 12 in. Twp. 2N
    Length: 10 ft. Slot 3/32 Rge. 9W
    Elev. ____



15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
12"	.250 Steel		
	32.75 lbs/ft		

SHOW LOCATION IN SECTION PLAT
480'E Nwly – SW NE
Irrigation

16. Size Hole below casing: -0- in.
17. Static level 13 ft. below casing top which is 1 ft. above ground level. Pumping level 25 ft. when pumping at 1000 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil	4'	4'
Brown Clay	6'	10'
Fine Sand	50'	60'
Coarse Sand & Rock	58'	118'
	✓	✓
Total Depth		118'

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED David K. McCord DATE 5-28-85

WELL LOG #5

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored X. Hole Diam. 36 in. Depth 70 ft.
   Curb material ____. Buried Slab: Yes ____ No X
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ____. Finished in Drift ____. In Rock ____.
   Tubular ____. Gravel Packed X.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
gravel	70	10
concrete	10	0

2. Distance to Nearest:
   Building ok Ft. — Seepage Tile Field ok
   Cess Pool ok — Sewer (non Cast Iron) ok
   Privy ok — Sewer (Cast Iron) ok
   Septic Tank ok — Barnyard ok
   Leaching Pit ok — Manure Pile ok
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed Nov. 6, 1980
5. Permanent Pump Installed? Yes ____ Date ____ No X
   Manufacturer ____ Type ____ Location ____
   Capacity ____ gpm. Depth of Setting ____ Ft.
6. Well Top Sealed? Yes X No ____ Type concrete cap
7. Pitless Adapter Installed? Yes ____ No ____
   Manufacturer ____ Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes ____ No ____
10. Pressure Tank Size ____ gal. Type ____
    Location ____
11. Water Sample Submitted? Yes ____ No X

REMARKS:

IDPH 4.005
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Farmers Energy Corp. Well No. ____
    Address Box #176, National City, Ill.
    Driller Clarence Kohnen License No. 102-30
11. Permit No. #96992 Date Oct. 28, 1980
12. Water from sand & gravel (Formation) at depth 32 to 70 ft.
13. County St. Clair
    Sec. 6, 6a
    Twp. 2 N
    Rge. 9 W
    Elev. X
14. Screen: Diam. ____ in. Length: ____ ft. Slot ____

SHOW LOCATION IN SECTION PLAT

89 W, 92 W, SE/c SW NE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
36	concrete pipe	0+1	70

16. Size Hole below casing: ____ in.
17. Static level ____ ft. below casing top which is ____ ft. above ground level. Pumping level ____ ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
top soil brown	2	2
dark clay	4	6
dark clay – sand	24	30
dark gray sand – fine	5	35
gray sand & gravel	31	66
gray clay – sand & gravel	2	68
redish gray sand & gravel	2	70

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Clarence Kohnen DATE 12-5-80

WELL LOG #6

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

TRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ___. Bored ✓. Hole Diam. 30 in. Depth 29 ft.
   Curb material ___. Buried Slab: Yes ___ No ___
   b. Driven ___. Drive Pipe Diam. ___ in. Depth ___ ft.
   c. Drilled ___. Finished in Drift ___. In Rock ___.
   Tubular ___. Gravel Packed ✓.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 25 Ft. — Seepage Tile Field ___
   Cess Pool ___ — Sewer (non Cast iron) ___
   Privy ___ — Sewer (Cast iron) ___
   Septic Tank N/O — Barnyard ___
   Leaching Pit ___ — Manure Pile ___
3. Well furnishes water for human consumption? Yes ✓ No ___
4. Date well completed ___
5. Permanent Pump Installed? Yes ___ Date ___ No ✓
   Manufacturer ___ Type ___ Location ___
   Capacity ___ gpm. Depth of Setting ___ Ft.
6. Well Top Sealed? Yes ✓ No ___ Type ___
7. Pitless Adapter Installed? Yes ___ No ✓
   Manufacturer ___ Model Number ___
   How attached to casing? ___
8. Well Disinfected? Yes ✓ No ___
9. Pump and Equipment Disinfected? Yes ___ No ___
10. Pressure Tank Size ___ gal. Type ___
    Location ___
11. Water Sample Submitted? Yes ___ No ✓

REMARKS:

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner John Hogard Well No. ___
    Address East St. Louis' Fld
    Driller [illegible] License No. 92-472
11. Permit No. 36226 Date ___
12. Water from clay Formation 13. County St. Clair
    at depth ___ to ___ ft.
    Sec. 5
14. Screen: Diam. ___ in.
    Length: ___ ft. Slot ___
    Twp. 2N
    Rge. 9W
    Elev. ___

SHOW LOCATION IN SECTION PLAT
NE NE NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
30	Concrete	30	

16. Size Hole below casing: ___ in.
17. Static level ___ ft. below casing top which is ___ ft. above ground level. Pumping level ___ ft. when pumping at ___ gpm for ___ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
clay	29	

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 3-2-7

WELL LOG #7

WELL LOG #8

173698

City National City County St. Clair sp SO_4 NO_3 N

Section Gold Twp. No. 2N Range 9W (P)

Location (in feet from section corner) 2550'N, 950'W of SE cor. vol. Geids.

(Skelly) Rt. 203

Owner Gateway Truck Stop Authority see Hank

Contractor Harold Watson Well Drilling Address E. St. Louis, Illinois

Date drilled Elev. above sea level top of well 405 ± TH

Depth 85'

Log Sand & Gravel

Were drill cuttings saved Where filed

Size hole If reduced, where and how much

Casing record

Distance to water when not pumping Distance to water is

feet after pumping at G. P. M. for hours.

Reference point for above measurements Could not measure water level Well under pavement.

Type of pump Jet Distance to cylinder

Length of cylinder Length of suction pipe below cylinder

Length stroke Speed

Hours used per day Type of power

Rating of motor Rating of pump in G. P. M.

Can following be measured: (1) Static water level No

(2) Pumping level No (3) Discharge No

(4) Influence on other wells No

Temperature of water Sample from pressure tank Was water sample collected Yes

Date Dec 14, 1967 Effect of water on meters, hot water coils, etc.

Date of Analysis Analysis No.

Recorder W. H. Bebensee

Date Dec. 14, 1967

2807-22617 12